# AUDIO / VIDEO STEREO RECEIVER

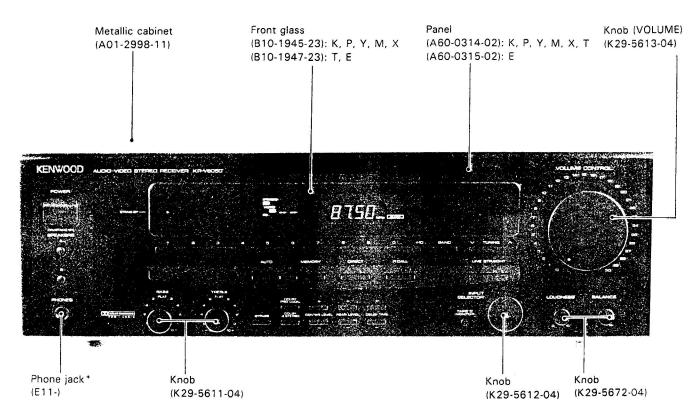
# KR-V6050/7050

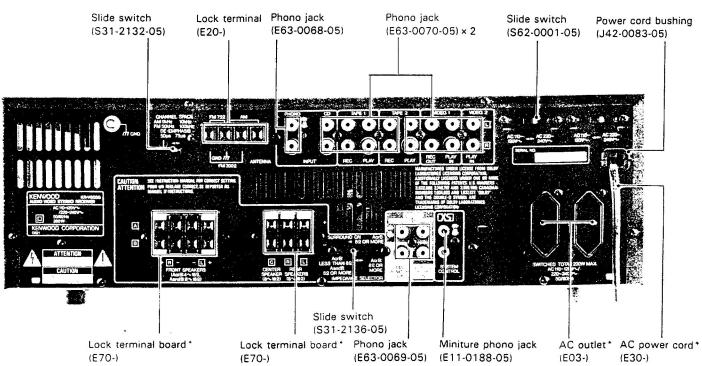
# SERVICE MANUAL

# KENWOOD

©1993-2 PRINTED IN JAPAN B51-4700-00(S)4404

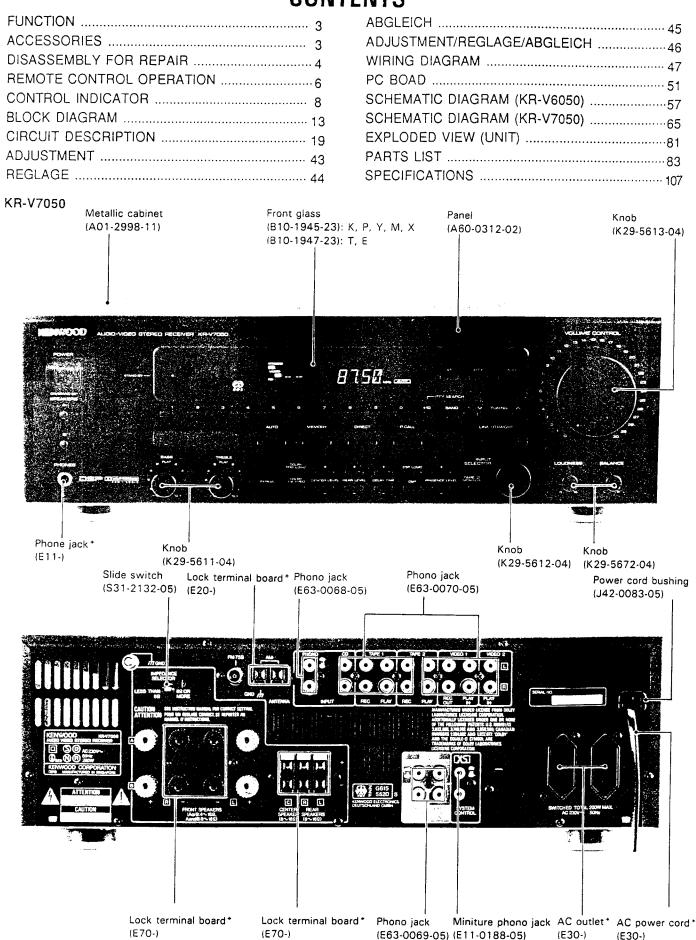
### KR-V6050





# (R-V6050/7050

# **CONTENTS**



### **FUNCTION**

	KR-V6	050	KR-V7050		
	K,P,M,Y,X	Е	Т	K,P,M,Y,X	E,T
PRO LOGIC/3 STEREO	0		0	0	0
DSP/DSP LOGIC				0	0
RDS (AF, PTY, DISPLAY)		0	0		0
Large SP Terminal		0	o consiste a		0
MUTE (Remote control unit)		0		0	0

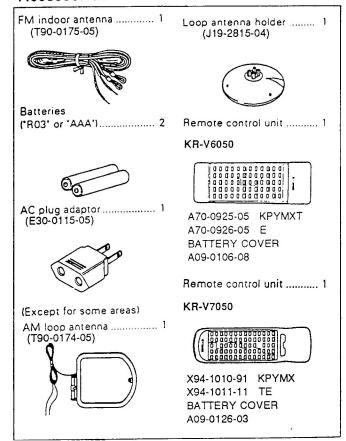
O: There is the funtction

[SPEAKER IMPEDANCE SELECTOR and SURROUND OUTPUT]

KR-V6050: When the IMPEDANCE SELCTOR is in position, sound is not output from the center and rear speakers.

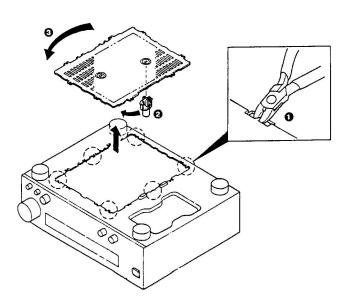
KR-V7050: When the IMPEDANCE SELECTOR is in or position, sound is output from the center and rear speakers.

# Accessories

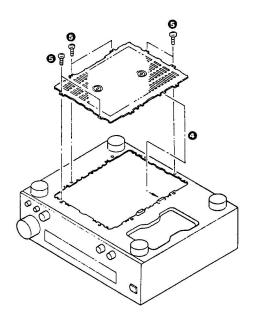


## Removing the chassis for repair.

- 1. Cut the 6 places with a pair of nippers. 1.
- 2. Move the unit holder from the current position to the open mounting position. 2.
- Rotate the lid, which was cut off, by 180° degrees.
   3.



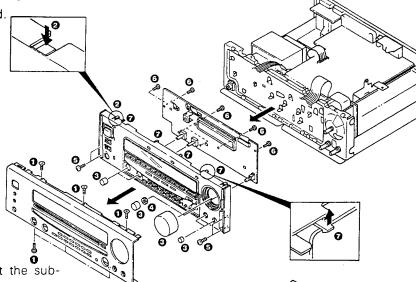
4. Insert the lids in the 2 places of the chassis (4), and mount them with the 6 screws (3 × 6) (5).



# **DISASSEMBLY FOR REPAIR**

- 1. Remove the 6 screws 1, press the 2 claws 2 of the sub-panel, and remove the front panel.
- 2. Remove the 6 knobs 3 and the nut 4.
- 3. Remove the 4 screws 5 and remove the sub-panel together with the circuit board.

4. Remove the 6 screws 6, pull the 14 claws 7 of the sub-panel, and remove the circuit board.

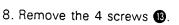


5. Remove the 6 screws 8, and pull out the subchassis.

6. Remove the screw 9, and disconnect the phone jack by pressing the claw 10.

7. The volume control (X13) (D/6), the loudness and the balance (X13) (E/3) can be removed when the

2 screws 11 and the nut 12 are removed.

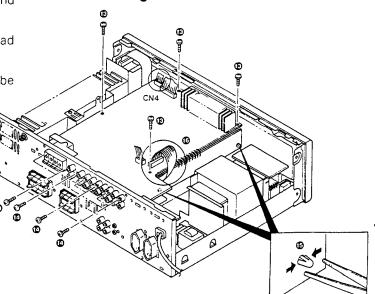


9. Remove the 7 screws 1.

10. Hold the extremity of the 2 clamps with tweezers and the like, and remove the circuit board 15.

11. In the case of the E. T type, remove the parallel lead wires of CN4.

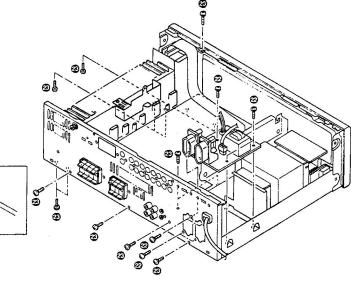
\*When assembling, take care for the cord not be caught between the two circuit boards. 6

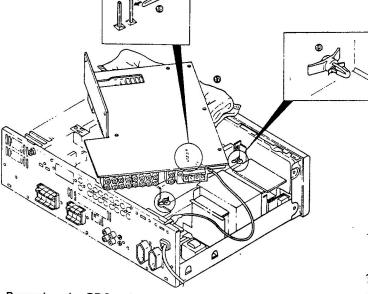


# **DISASSEMBLY FOR REPAIR**

# After removing from < X14> PCB body.

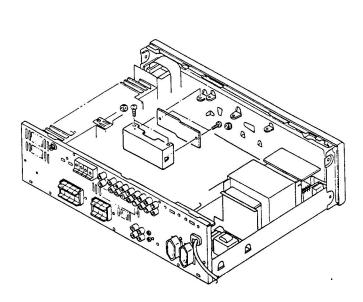
- 12. Turn the circuit board as a whole upside-down, and lay a piece of cloth between the circuit board and the chassis. ①.
- 13. When checking the tuner unit of X14, make sure of connecting the GND (TP17) of the tuner unit with the GND of the chassis with an alligator clip and the like. 19.
  - \*When assembling, position the clamps parallel to the chassis. **(9)**.
- 15. Remove the 7 screws **29**, and let the circuit board get afloat.
- 16. Moreover, remove the 15 screws 23.

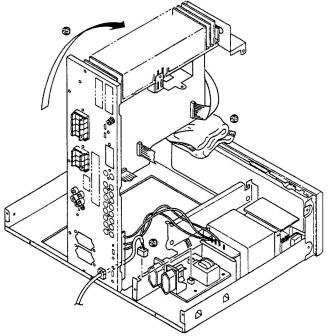




# Removing the RDS unit.

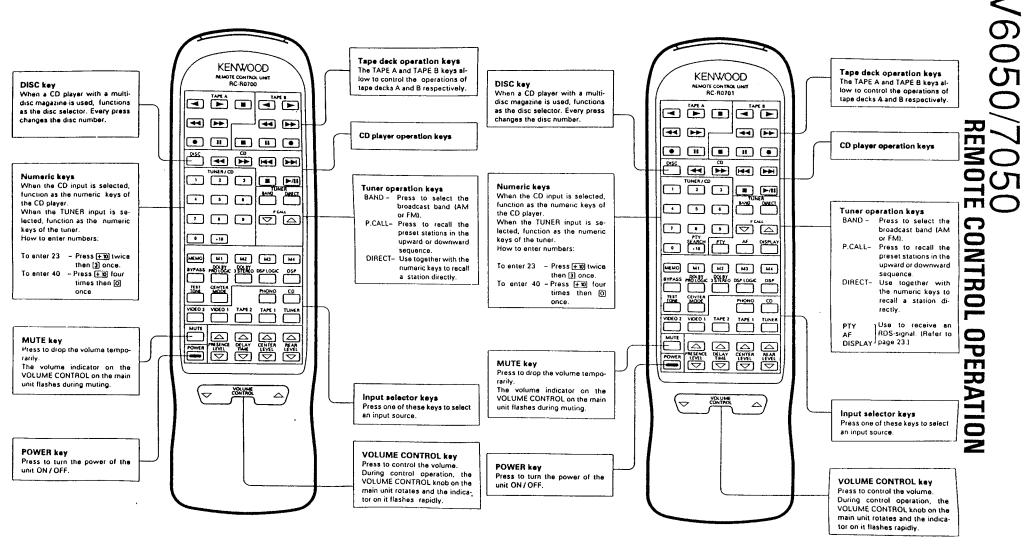
- 14. Remove the 2 screws **20**, and then remove the screws **21** to remove the circuit board.
- 17. Undo the connector (CN4) **4** of the circuit boards (X13) (B/6).
- 18. Put up the main circuit board sideways. 25.
- 19. Lay a piece of cloth between the main board and the chassis. **3**.

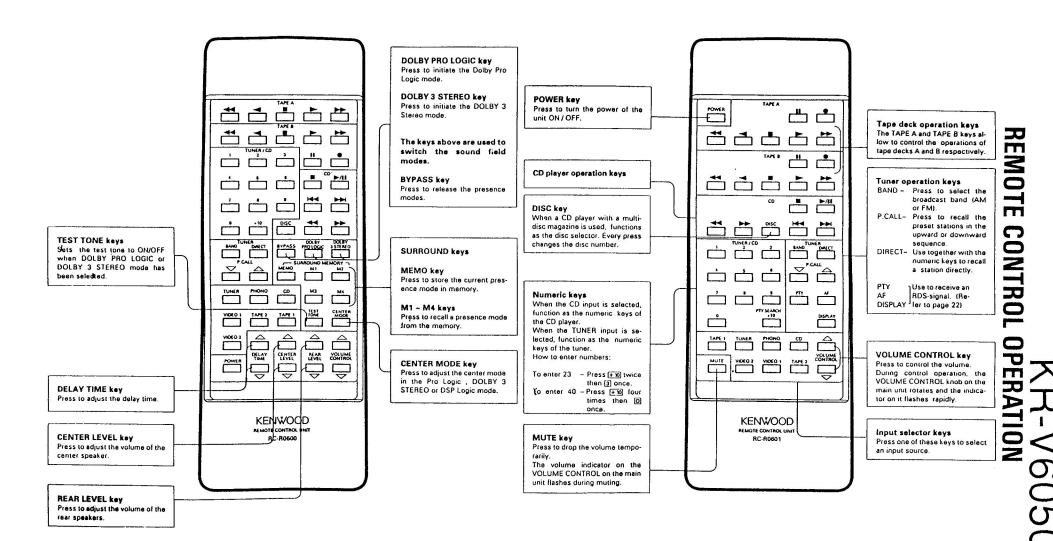




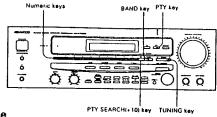
### ■ Basic operation keys

### ■ Basic operation keys





Refer to page 23 for a description of the RDS feature.



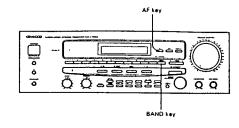
### ■ Searching for a desired program type

<PTY (Program Type Identification) Search>

By specifying the type of program (genre) you want to listen to, the tuner automatically searches for a station which is currently broadcasting a program of the specified type.

1	Set the broadcast band to FM.		~	9	8.80_83
2	Press the PTY key. When an RDS broadcast is reprogram type is shown on the d PTY data is available or if the st an RDS station, "NONE" is dis		Lights.  NENS	(Party) (Party) (Party)	
3	Select the desired program type.  Select while "PTY" is lit.  (A) Use the numeric keys to directly select one of the ten program types numbered (i) to (i)  (i) Press the TUNING (P CALL) key to sequentially select from the fifteen available program types. Release the key when the desired program type is displayed.  Remote control unit	DOWN	1 2 3 4 5 6 7 7 8 9 0 — — — — — — — — — — — — — — — — — —	Program Type Name Pop Music Rock Music M.O R. Music Light Classical Senous Classical Other Music News Current Affaira Information Sport Education Drama Cutture Science Varied Music Middle of the R	Display POP M ROCK M MOR M LIGHT M CLASSICS OTHER M NEWS AFFAIRS INFO SPORT EDUCATE DRAMA CULTURE SCIENCE VARIED
4	a in a program of the desired type cannot be rooms. No	Display while is searching for a coedcast.  When a state received.	Rock Dink	POP M	m type name display

Refer to page 23 for a description of the RDS feature.



### ■ Searching for the best frequency

<AF (Alternative Frequencies) Search>

If more than one FM station is broadcasting the same program, this function will automatically select the station offering the strongest signal or the least interference. (The AF feature will not function if the RDS indicator is not lit.)

1 Set the broadcast band to FM.	-10 BANO	- 107.90 PM
2 Receive an RDS broadcast station	n.	Check that the indicator is lit.
<ul> <li>Tune in the desired station and verify that the lights.</li> <li>After a short time, the "AF" indicator lights. After verifying that the "AF" indicator is lit, next step.</li> </ul>		BAYERN 4
3 Select the search mode.	Display while the tune is searching.	9999
Press the AF key		blinks. The frequency changes continuously.
	When a station is received.	
		Alter about several seconds
<ul> <li>Scanning (station searching) starts.</li> <li>No sound is heard while searching is being ca</li> <li>When a station is found, the "AF" indicator go</li> <li>After several seconds, the station name is dis</li> </ul>	es out.	BAYERN 4 PG
	•	Station name display

### AF (Alternative Frequencies) Feature

- With some stations, it may take some time for the "AF" indicator to light.
- To obtain the best reception conditions, we recommend waiting a few minutes after the "AF" indicator lights before pressing the AF key.
- It is useful to use the number keys to preset (memorize) stations received with this AF function. (See page 21.)
- The selected frequency may vary depending on the signal conditions.
- There are some ROS stations which do not support this AF function. For such stations, the "AF" indicator does not light.

# KR-V6050/70 INDICATORS/OPERATION OF CONTROL

### M2 M3 Mi DOLBY PRO LOGIC key DOLBY 3 STEREO key -DSP LOGIC key TAPE 2 TAPE 1

[Example KR-V7050]

### RDS (Radio Data System) : E, T Typeonly

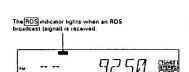
RDS is a system which transmits useful information (digital data) for FM broadcasts together with the broadcast signal. Tuners and receivers designed for RDS reception can extract the information from the broadcast signal for use with various functions such as automatic display of the station name.

### This unit is equipped with the following functions utilizing RDS data:

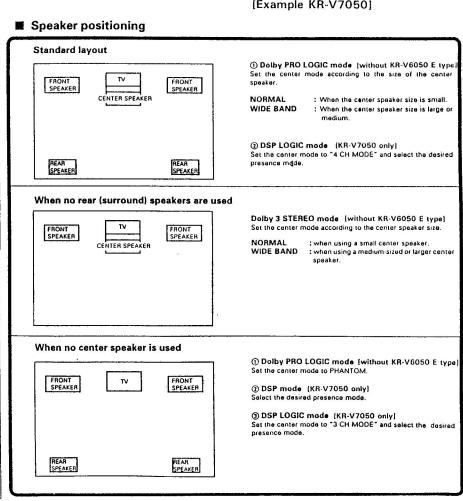
(In some areas, some functions cannot be activated and some function names are differ as follows )

- PTY (Program Type Identification) Search: (See page 24) The tuner automatically searches for a station which is currently broadcasting a specified program type (genre).
- AF (Alternative Frequencies) Search: (See page 25) When a weak signal is received, the tuner automatically searches for alternative frequencies broadcasting the same program and selects the best signal.
- PS (Program Service Name) Display: (refer to the table below.) When an RDS broadcast is received, the station name is automatically displayed.
- CT (Clock Time) Display: (refer to the table below.) Some RDS stations transmit clock data along with the broadcast signal. When the CT display is selected with the DISPLAY key, the

hour and minute are displayed.



### DISPLAY key Display mode priority ranking When an RDS broadcast is received: (1) Pressing the DISPLAY key changes the display contents. The display returns to the original display after about 5 seconds. ()PS (Program Service Name) Display: When an RDS broadcast is received, the station name is automatically displayed. If no PS data is transmitted, the display changes to the @ Frequency display (2) Frequency Display: The frequency of the current station is displayed. 98.80.... ③CT (Clock Time) Display: When an RDS broadcast is received, the hour and minute are shown on the display. If no clock data is available, the clock time 12:34 is not displayed and the program service name is displayed.



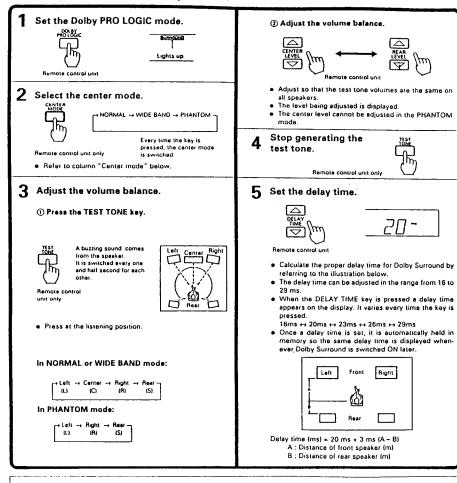
# **INDICATORS**

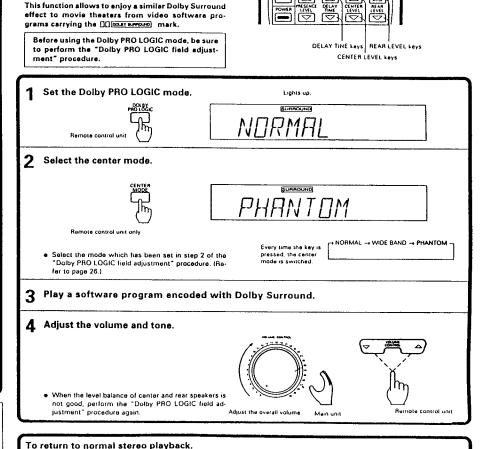
DOLBY 3 STEREO

key

CENTER MODE key

### ■ Dolby PRO LOGIC field adjustment





BYPASS key

TEST TONE key

MUTE

DOLBY PRO LOGIC key

■ Operation of Dolby PRO LOGIC

Remote control unit

playback

### Center mode

Selectione of the following center modes according to the type of the presence speakers in your system.

NORMAL - : Use this mode with a center speaker of a compact size.

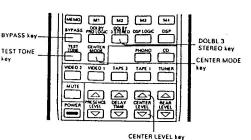
- WIDE BAND: Use this mode wit a center speaker of a medium or larger size.
- If you cannot identify whether your center speaker is of the medium or compact size, try both the NORMAL and WIDE BAND mode and use the one that can provide better sound positioning.

PHANTOM: Use this mode when the center speaker is not used.

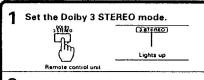
 Even without the center speaker, the signal is processed in a simulated manner to ensure proper center image positioning and provide the enjoyment of Dolby Surround.



Every time the key is pressed, the center mode is switched.



### ■ Dolby 3 STEREO adjustment



### 2 Select the center mode.

Every time the key is pressed, the center mode is switched.



Remote control unit only

NORMAL ++ WIDE BAND

 Set the center mode to NORMAL if using a small center speaker, or set to WIDE BAND if using a medium-sized or larger speaker.

### 3 Adjust the center speaker volume.

### ① Press the TEST TONE key.

Remote

control

A buzzing sound comes from the speaker, it is switched every one and helf second for each other.



- Press at the listening position.
- When at 3 stereo sound is produced in the sequence:
   LEFT → CENTER → RIGHT (REAR not available with 3 stereo mode.)

### ② Adjust the volume.



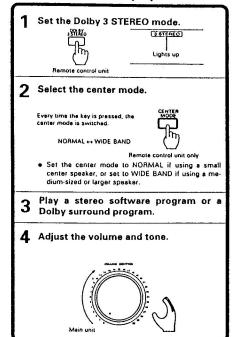
- And adjust so that the level of the center speaker is equal to that of the left and right speakers.
- The rear level adjustment is invalid.

Stop generating the test tone.



Remote control unit onl

# ■ Dolby 3 STEREO playback



To return to normal ste	ereo playback.
BYPASS	GOES Off
Remote control unit	

The DSP (Digital Signal Processor) allows to reproduce the atmospheres of various sound fields. By applying additional adjustments, a custom presence effect of yourself can also be created.

① DSP presence modes.....ARENA, JAZZ CLUB, STADIUM, DISCOTHEQUE ② DSP Logic presence modes...LARGE THEATER, SMALL THEATER

Satisfactory effect can be enjoyed by selecting one of the presence modes by referring to the table below. Additionally, the parameters shown in the table can also be adjusted according to your liking.

Presence level: Variable in the range from - 20 to 0 dB.

Delay time: Variable in the range from 3 to 50 ms.

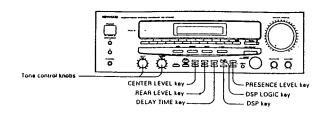
Rear level: Variable in the range from - 30 to + 10 dB.

Center level: Variable in the range from - 30 to + 10 dB.

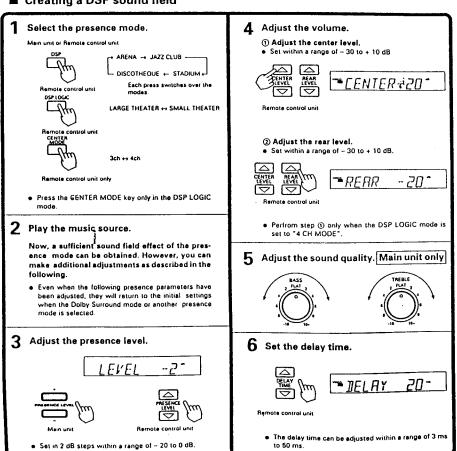
	Init	ial setting val	ues	Variable setting values		
Presence mode	CHANNEL MODE	DELAY TIME	PRESENCE LEVEL	CENTER LEVEL	REAR LEVEL	
ARENA	*	10 ms	12 dB	•	~ 30 dB~ + 10 dB	
JAZZ CLUB	•	16 ms	– 12 dB	*	- 30 dB- + 10 dB	
STADIUM	*	26 ms	- 8 d <b>\$</b>	*	- 30 dB- + 10 dB	
DISCOTHEQUE	•	16 ms	- 8 dB	*	- 30 dB- + 10 dB	
LARGE THEATER	3ch	32 ms	- 8 dB	. •	- 30 dB~ + 10 dB	
LANGE THEATER	4ch	32 ms	- 8 dB	- 30 dB~ + 10 dB	- 30 dB-4+ 10 dB	
SMALL THEATER	3ch	16 ms	– 16 dB		- 30 dB~ + 10 dB	
	4ch	16 ms	– 16 dB	- 30 dB~ + 10 dB	- 30 dB~ + 10 dB	

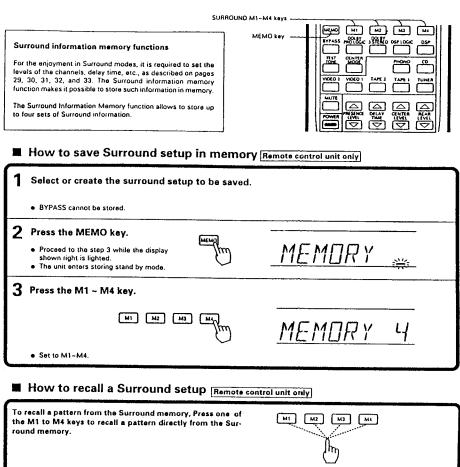
# 

SMALL THEATER ...... Reproduces the sound field of a small movie theater or hall

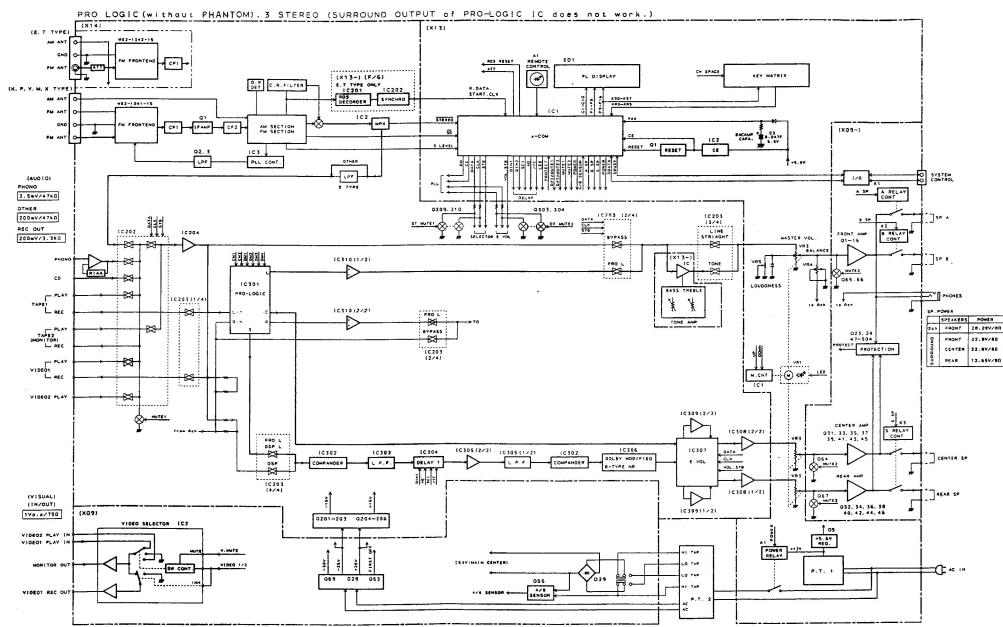


# **■** Creating a DSP sound field

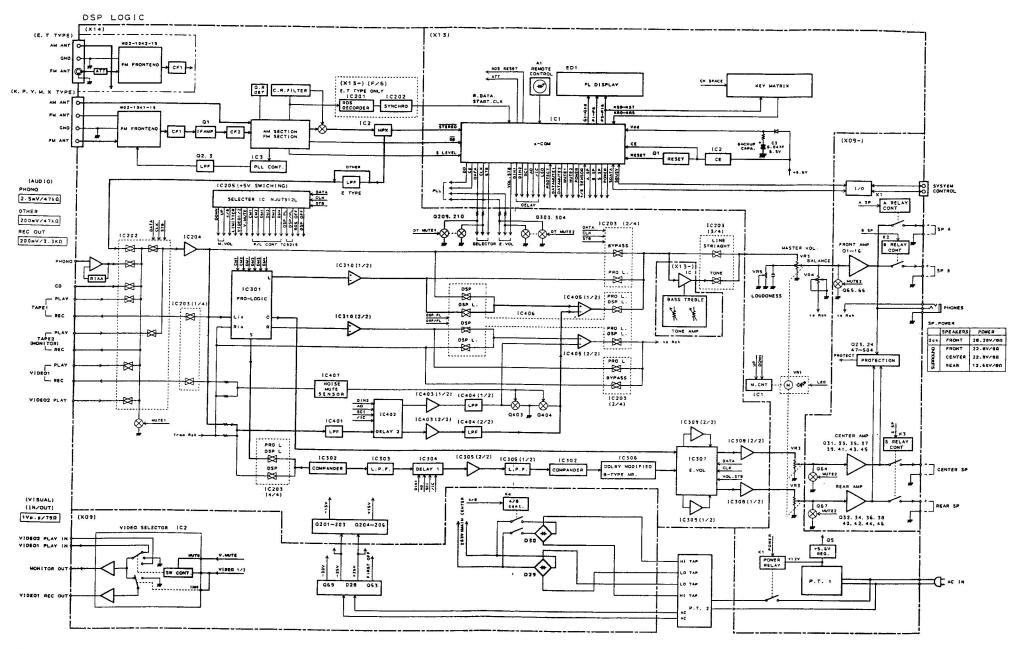




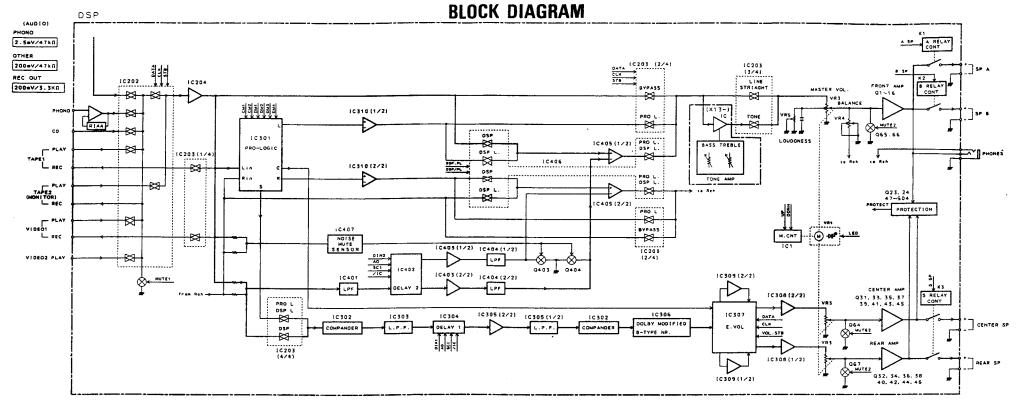
# KR-V6050/7050 KR-V6050/7050 BLOCK DIAGRAM

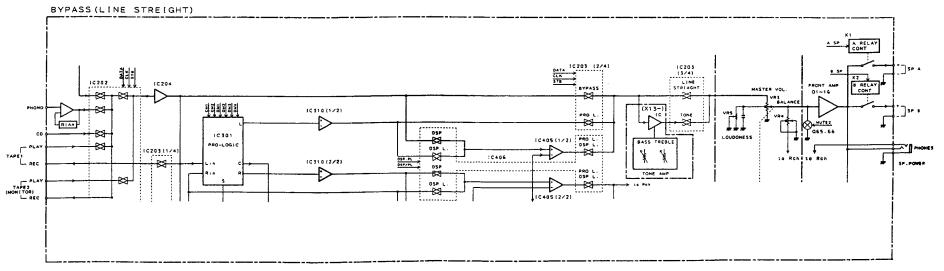


# KR-V6050/7050 KR-V6050/7050 BLOCK DIAGRAM



# KR-V6050/7050 KR-V6050/7050





# **CIRCUIT DESCRIPTION**

# 1. Function description

### **Features**

### **AMP**

Seven-position selector: (CD, TUNER, PHONO, TAPE1,

TAPE2, VIDEO1, VIDEO2/LD)

Six audio input terminals: (CD, PHONO, TAPE1, TAPE2,

VIDEO1, VIDEO2/LD)

Three audio output terminals: (TAPE1, TAPE2, VIDEO1)

Two video output terminals: (VIDEO1, VIDEO2/LD)

One video output terminal: (VIDEO1)

LINE STRAIGHT SURROUND mode. DSP [KR-V7050]

(ARENA, JAZZ CLUB, STADIUM DISCOTIQUE)

DSP-LOGIC [KR-V7050]

(3ch LARGE THEATER, 3ch SMALL THEATER, 4ch

LARGE THEATER, 4ch SMALL THEATER)

PRO-LOGIC, [KR-V6050 (without E TYPE)/V7050]

(NORMAL, WIDE, PHANTOM)

3-STEREO [KR-V6050 (without E TYPE)/V7050]

(NORMAL, WIDE)

Speaker A/B changeover.

Surround memory (M1 to M4). [Without KR-V6050 E

type]

(Surround mode, center mode, delay time, center level,

rear level, presence level)

TAPE 2 monitor.

### TUNER

20ch random preset...

Tuning control by IF count.

Direct selection.

RDS function (E, T-TYPE only).

# 2. Conditions according to the destination and model

### AMP

MODEL	DIOD	E SW	Surround function
MODEL Surro		Surround function	
KR-V7050	0	0	PRO-LOGIC, 3-STEREO, DSP, DSP-LOGIC
KR-V6050 (except E)	0	1	PRO-LOGIC, 3-STEREO
KR-V6050 (E only)	1	X	No surround

X: Don't Care

### **TUNER**

Destination	DIODE SW		Band	Receiving Remarks	arks Channel Space	IF	RF	Note			
Destination	3	2	1	0	Danu	neceiving hemaiks	Charmer Space	11	n i	14010	
K1	0	0	0		FM	87.5 MHz ~ 108.0 MHz	100 kHz	+ 10.7 MHz	50 kHz		
N I	١	0		0	AM	530 kHz ~ 1610 kHz	10 kHz	+ 450 kHz	10 kHz		
K2	0	0	1 0	1		FM	87.5 MHz ~ 108.0 MHz	100 kHz	+ 10.7 MHz	50 kHz	
NZ					U	AM	530 kHz ~ 1700 kHz	10 kHz	+ 450 kHz	10 kHz	
Е	0	1		^	FM	87.5 MHz ~ 108.0 MHz	50 kHz	+ 10.7 MHz	50 kHz		
	U		0	0	AM	531 kHz ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz		
				FM	87.5 MHz ~ 108.0 MHz	50 kHz	+ 10.7 MHz	50 kHz	With RDS		
E	1		0 0	0	0	AM	531 kHz ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz	

### [DIODE MATRIX: <X14> DIODE SW NO.]

μ-com	PIN NO.	55	56	57	58	59	60
PIN NO.	PIN NAME	KR5	KR4	KR3	KR2	KR1	KRO
61	KS7	Channel space	AM 1610/1700	RDS No/Yes	DSP. DOL/ DOL ONLY	SURROUND Yes/No	(X)
DUIDE SW NO.		2	1	3	4	5	0
<x13> DIOE</x13>	E Ref. No.	D32	D31	D33	D34	D35	

# **CIRCUIT DESCRIPTION**

Diode SW 0 →

• Diode SW 1 → AM band range/K TYPE only

0: AM NARROW

1: AM WIDE

• Diode SW 2 → Channel base (Products bound for M:

Changeover with switch)

0: FM 100 kHz/step, AM 10 kHz/step

1: FM 50 kHz/step, AM 9 kHz/step

Diode SW 3 → With/without RDS/E TYPE only

0: Without RDS

1: With RDS

• Diode SW 4 → Surround mode

0: DOLBY function & DSP function

1: DOLBY function only

Diode SW 5 → With/without surround

0: With surround

1: Without surround

### 3. Initial state

Speaker A

Speaker B

1	POWER OFF		٠	PROLOGIC mode	NORMAL
2	AMP system		•	3STEREO mode	NORMAL
•	Audio selector	TUNER	•	DSP mode	ARENA

 DSPLOGIC mode SMALL THEATER Video system selector VIDEO1

DSPLOGIC channel mode

PRESENCE LEVEL:

JAZZ

•	TAPE2 MONITOR	OFF	DOLBY	PROLOGIC, 3STEREO	-20 dB
•	LINE STRAIGHT	OFF	DSP	ARENA, JAZZ	-12 dB
3	TUNER system			STADIUM, DISCO	-8 dB
•	Band	FM	DSPLOGIC	SMALL THEATER	–16 dB
•	Frequency	Lower limit of FM		LARGE THEATER	-8 dB

**DELAY TIME:** (87,5 MHz)

20 ms DOLBY **PROLOGIC** TUNING mode **AUTO TUNING** 10 ms DSP **ARENA** (AUTO STEREO) 16 ms

· P. CH indication --ch

ON

OFF

4 SURROUND system

26 ms STADIUM 16 ms DISCO Mode BYPASS (OFF)

16 ms CENTER LEVEL 0 dB **DSPLOGIC** SMALL THEATER LARGE THEATER 32 ms REAR LEVEL 0 dB

⑤ Test frequency

	K1 TYPE	K2 TYPE	E TYPE
01ch	FM 98.00 MHz	FM 98.00 MHz	FM 98.00 MHz
02ch	FM 108.00 MHz	FM 108.00 MHz	FM 108.00 MHz
03ch	AM 630 kHz	AM 630 kHz	AM 630 kHz
04ch	AM 990 kHz	AM 990 kHz	AM 990 kHz
05ch	AM 1440 kHz	AM 1440 kHz	AM 1440 kHz
06ch	AM 1610 kHZ	AM 1700 kHz	AM 1602 kHz
07ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
08ch	FM 98.50 MHz	FM 98.50 MHz	FM 98.50 MHz
09ch	AM 530 kHz	AM 530 kHz	AM 531 kHz
10ch	FM 89.10 MHz	FM 89.10 MHz	FM 89.10 MHz
11ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
12ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
13ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
14ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
15ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
16ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
17ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
18ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
19ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz
20ch	FM 87.50 MHz	FM 87.50 MHz	FM 87.50 MHz

# CIRCUIT DESCRIPTION

### 4. Test mode

### Main unit test mode

- Setting method
   Turn the AC power ON while pushing the "TUNING DOWN" key.
- Cancellation method
   Turn the AC power OFF.
- 3) Contents
- Start of the main unit test mode The operation gets in the test mode through a main unit key, when the AC power is turned ON while pushing the "TUNING DOWN" key. Three operations are carried out in this case.
- Automatic power ON
- All fluorescent character display tubes and LED light up
- Initialization of all states except POWER ON/OFF
  The "all indications lit up" state is canceled by pushing any key of the main unit. The states changed during the test mode are initialized when the main unit test mode is canceled (AC power OFF).
- ② Automatic motor VR UP/DOWN (AMP) The (16-second UP → 16-second DOWN → Stop) operation of the motor VR is carried out when the "TAPE 2" key is operated.
  - Therefore, "TAPE 2 MONITOR" can not be changed over during the main unit test mode.

- MUTE signal output (AMP)
  No control of selector MUTE (MUTE 1) is carried out.
- (4) Test mode operation of 0~9, +10 (TUNER)
- a) When the + 10 key is not operated, the channels 1 to 9 (keys 1 to 9), as well as the channel 10 (key 0) can be called.
- b) When the key + 10 is operated once, the channels 11 to 19 (keys 1 to 9) as well as the channel 20 (key 0), can be called.
- c) When the + 10 key is operated once again, the operation returns to the case "a) When the + 10 key is not operated".
- ⑤ Processing of keys available only in the remote controller
- a) Processing related to the AMP: None
- b) Processing related to the TUNER: None
- Processing related to the SURROUND (Depends on the SURROUND: MODE)
  - "P. CH CALL" key: Works in the same way as the "CENTER MODE" key.
  - "DIRECT" key: Works in the same way as the "TEST TONE" key.
  - Of course, the operations of "P. CH CALL" and "DIRECT" can not be carried out.
- 6 Cancellation of the main unit test mode The test mode is canceled, and the operation returns to the initial state when the AC power is turned OFF during the test mode.

POWER (13)

# **CIRCUIT DESCRIPTION**

# **Timing Chart**

1) POWER ON

/MUTE1 (53)

/MUTE2 (12)

VMUTE < × 14 > IC205 (22)

SEL IC (9, 10, 54)

Electrical VOL IC (9, 10, 46)

VIDEO SEL < × 14 > IC205 (21)

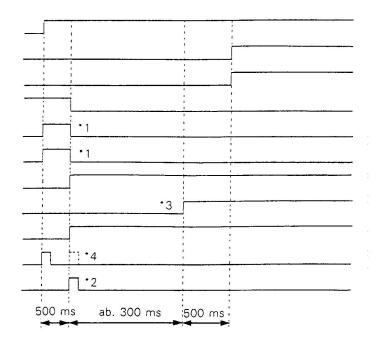
SPEAKER RELAY (14 ~ 16)

FL DRIVE (1 ~ 7, 61 ~ 80)

LED DRIVE (18)

Serial communication (41, 42)

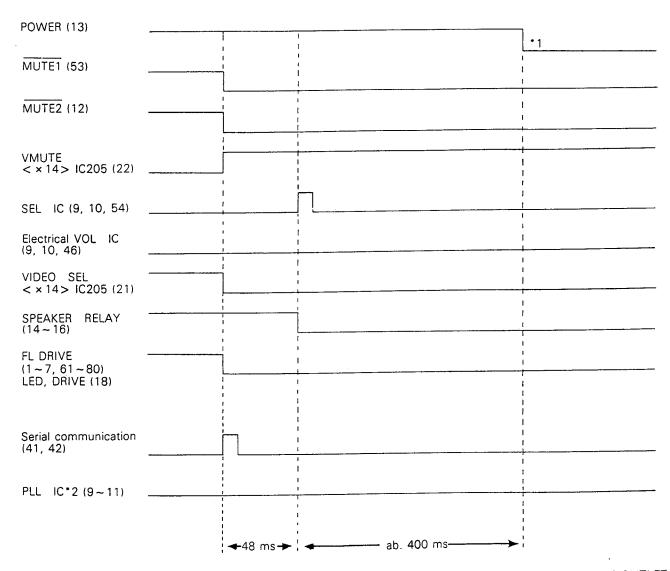
PLL IC (9~11)



- \*1. Output of data to the selector IC and the electronic VOL. IC is continued during the time t1 to prevent unstable state of the IC. Moreover, resistors are connected without fail in series with the control lines of the selector IC and the electronic volume IC.
- \*2. This signal is outputted when the forcible MONO control signal of the TUNER is outputted from the port of the PLL IC (receiver).
- \*3. Protection detection is started immediately before connecting the SPEAKER RELAY.
- \*4. The SYSTEM ON code is outputted after the time t1 in the case of single item as well as system component AMP. and RECEIVER.

# **CIRCUIT DESCRIPTION**

# 2 POWER OFF

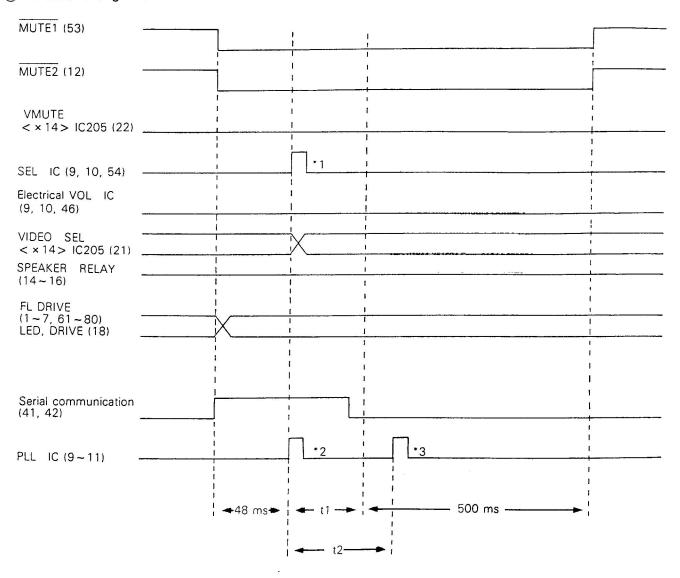


<sup>\*1.</sup> The disconnection of the AC OUTLET is delayed to drop the mechanism of the DECK connected to the AC OUTLET (SWITCHED).

<sup>\*2.</sup> This signal is outputted in the case of receiver.

# CIRCUIT DESCRIPTION

### (3) Selector changeover



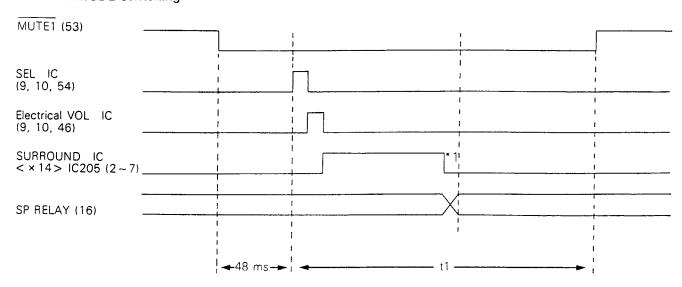
- t1: Data transmission time to the selector IC, DSP IC, etc.
- t2: 80 ms (+80 ms) IF COUNT time
- \*1. Pay special attention to the oscillation when switching. In particular, before switching the input selector, make sure of opening the REC OUT SW once.

Since data before changeover are left in the RAM for DELAY when the surround is composed by using DSP IC and the like, data of the current surround mode are sent once again to the DSP IC and the like after clearing the RAM for DELAY.

- \*2. Receivers without TUNER MUTE set the lower frequency limit of AM in the PLL IC, except when the selector is set to TUNER.
- \*3. The IF count completion data is set with this timing when IF count is being carried out.

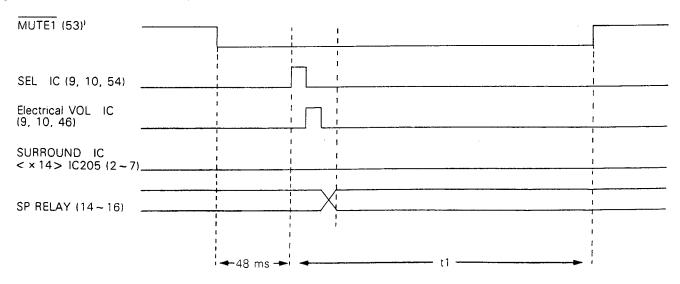
# CIRCUIT DESCRIPTION

# SURROUND ON and SURROUND MODE switching CENTER MODE switching



- t1: 1000 ms (Including time for transmission of data do selector IC, electronic VOL IC and SURROUND IC).
- \*1: Since data before changeover are left in the RAM for DELAY when the surround is composed by using DSP IC and the like, data of the current surround mode are sent once again to the DSP IC and the like after clearing the RAM for DELAY

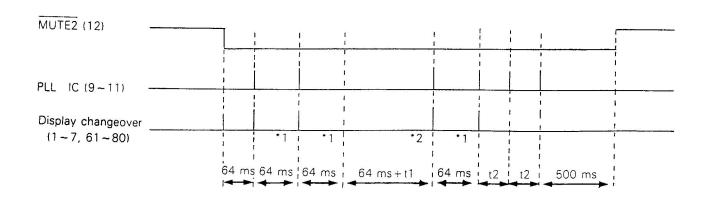
# **8 SURROUND OFF (BYPASS)**



t1: 1000 ms (Including time for transmission of data do selector IC and electronic VOL IC).

# **CIRCUIT DESCRIPTION**

# (17) AF SEARCH



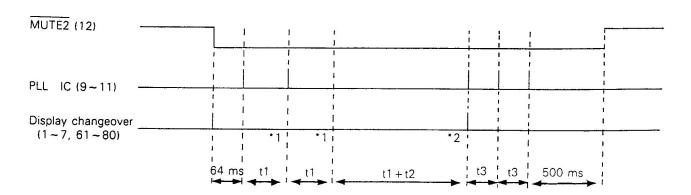
t1: 560 ms (RDS CHECK)

t2: 80 ms (Once or twice/IF count time)

\*1: When SD = High (Without station)

\*2: When SD = Low (With station)

## **18 PTY SEARCH**



t1: 32 ms (BAND EDGE = 64 ms)

t2: 480 mS + 240 mS (RDS CHECK)

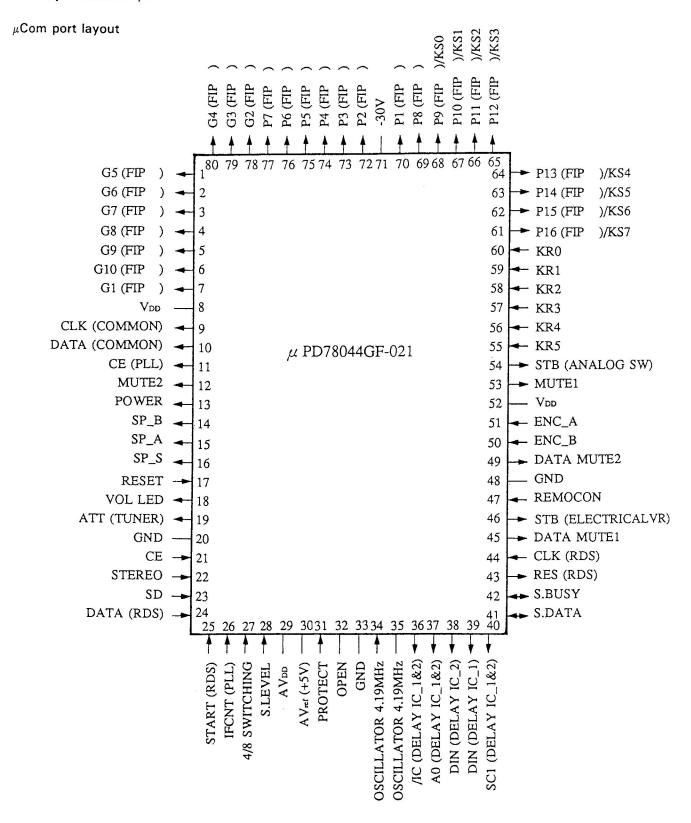
t3: 80 ms (Once or twice/IF count time)

\*1: When SD = High (Without station)

\*2: When SD = Low (With station)

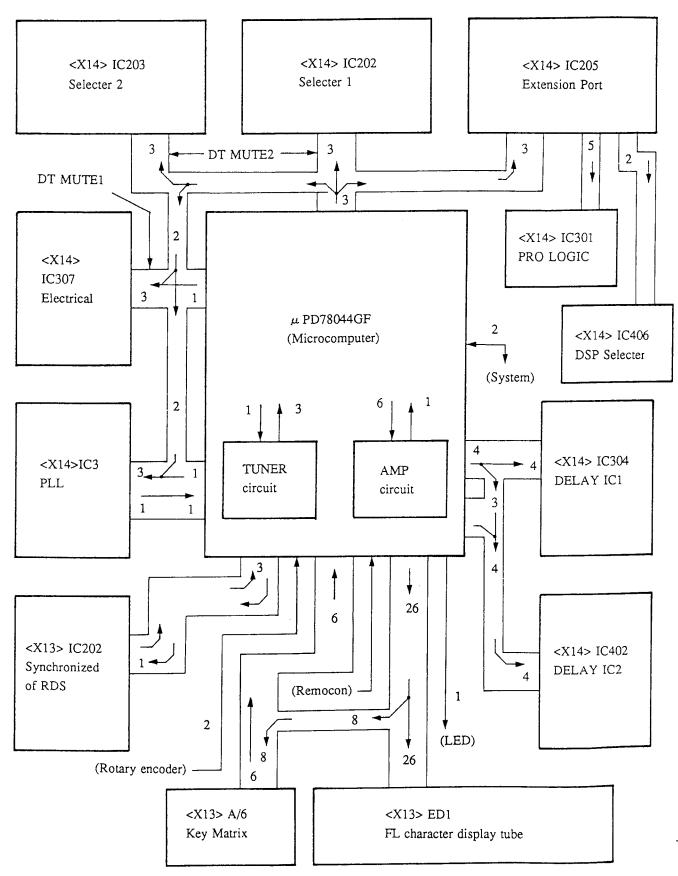
# **CIRCUIT DESCRIPTION**

Microprocessor: μPD78044GF-021 (X13: IC1)



# KR-V6050/7050 CIRCUIT DESCRIPTION

Microprocessor periphery block Diagram



# **CIRCUIT DESCRIPTION**

# Pin description

Pin Number	Port I/O	Name		Description	
1	OUT	G5	FL gird 5		2,000,00
2	OUT	G6	FL grid 6	_	
3	OUT	G7	FL grid 7	_	
4	OUT	G8	FL grid 8	_	
5	OUT	G9	FL grid 9		
6	OUT	G10	FL grid 10		
7	OUT	G1	FL gird 1	ation along	
8	_	Voo	Microprocessor power sup	ply	
9	OUT	CLK (COMMON)	Clock for control IC (ANAL	OG SW/PLL IC/Elec	stronic VOL)
10	OUT	DATA (COMMON)	Data for control IC (ANAL)	OG SW/PLL IC/Elec	tronic VOL)
11	OUT	CE (PLL)	PLL CE		
12	OUT	MUTE2	Amplifier MUTE control	H: MUTE OFF	L: MUTE ON
13	OUT	POWER	Power relay control	H: POWER ON	L: POWER OFF
14	OUT	SP_B	Speaker B relay control	H: SP_B ON	L: SP_B OFF
15	OUT	SP_A	Speaker A relay control	H: SP_A ON	L: SP_A OFF
16	OUT	SP_S	Surround speaker relay co	ntrol H: SP_S ON	L: SP_S OFF
17	IN	RESET	Microprocessor reset		
18	OUT	VOL LED	VOLUME LED control	H: LED OFF	L: LED ON
19	OUT	ATT (TUNER)	Attenuator control	H: ATT ON	L: ATT OFF
20	_	GND	A/D power supply		
21	IN	CE	Microprocessor CE		3
22	IN	STEREO	Stereo signal detection	H: MONAURAL	L: STEREO
23	IN	SD	Tuning signal detection	H: NOT TUNED	L: TUNED
24	IN	DATA (RDS)	RDS data		
25	IN	START (RDS)	RDS start bit		
26	IN	IFCNT (PLL)	IF CNT data (PLL DO)		
27	IN	4/8 Changeover	Speaker impedance switch	ing H: 4 Ω	L: 8 Ω
28	IN .	S. LEVEL	SIGNAL level (A/D)		
29		AVoo	A/D power supply		
30		AVref	A/D reference voltage (+5	5 V)	
31	IN	PROTECTION	Protection detection	H: PROTECTION	L: NORMAL
32		OPEN			
33		Vss (GND)	Microprocessor power sup	ply	
34	IN	X1	4.19 MHz oscillator		
35	OUT	X2	4.19 MHz oscillator		
36	OUT	/IC (DELAY1 & 2)	DELAY IC 1 & 2 initial clea	iring	
37	OUT	A0 (DELAY 1 & 2)	DELAY IC 1 & 2 address/d	ata	
38	OUT	DIN (DELAY 1)	DELAY IC 1 data		<i>i</i>
39	OUT	DIN (DELAY 2)	DELAY IC 2 data	y	
40	OUT	SC1 (DEALY 1 & 2)	DELAY IC 1 & 2 clock		

# **CIRCUIT DESCRIPTION**

Pin Number	Port I/O	Name	Description		
41	1/0	S. DATA	8 bit system DATA		
42	1/0	S. BUSY	8 bit system BUSY		
43	OUT	RESET (RDS)	RDS reset		
44	IN	CLK (RDS)	RDS clock		
45	OUT	DT MUTE 1	Data MUTE 1 H: DATA MUTE ON L: DATA MUTE OFF		
46	OUT	STB (Electrical VOL)	Electronic VOL STB		
47	IN	REMOCON	Remote controller input		
48		GND			
49	OUT	DT MUTE 2	Data MUTE 2 H: DATA MUTE ON L: DATA MUTE OFF		
50	IN	ENC_B ·	Encoder input B		
51	IN	ENC_A	Encoder input A		
52	_	Voo	Microprocessor power supply		
53	OUT	MUTE 1	Selector MUTE control H: MUTE OFF L: MUTE ON		
54	OUT	STB (ANALOG SW)	Analog SW STB		
55	IN	KR5	Key return 5		
56	IN	KR4	Key return 4		
57	IN	KR3	Key return 3		
58	IN	KR2	Key return 2		
59	IN	KR1	Key return 1		
60	IN	KRO	Key return 0		
61	OUT	P16/KS7	FL segment 16/Key scan 7		
62	OUT	P15/KS6	FL segment 15/Key scan 6		
63	OUT	P14/KS5	FL segment 14/Key scan 5		
64	OUT	P13/KS4	FL segment 13/Key scan 4		
65	OUT	P12/KS3	FL segment 12/Key scan 3		
66	OUT	P11/KS2	FL segment 11/Key scan 2		
67	OUT	P10/KS1	FL segment 10/Key scan 1		
68	OUT	P9/KS0	FL segment 9/Key scan 0		
69	OUT	P8	FL segment 8		
70	OUT	P1	FL segment 1		
71	_	-30 V (Vload)	FL drive power supply		
72	OUT	P2	FL segment 2		
73	OUT	P3	FL segment 3		
74	OUT	P4	FL segment 4		
75	OUT	P5	FL segment 5		
76	OUT	P6	FL segment 6		
77	OUT	P7	FL segment 7		
78	OUT	G2	FL grid 2		
79	OUT	G3	FL gird 3		
80	OUT	G4	FL grid 4		

# CIRCUIT DESCRIPTION

# RDS product operation (KR-V6050/7050: E, T type)

### 1. Outline of RDS

RDS (RADIO DATA SYSTEM) is a new FM broadcasting feature which is being carried out in the 87.5—108.0 MHz FM broadcasting frequency band. RDS consists of broadcasting digital signals on the subcarrier (57 kHz) of the FM signal, and the digital signal is on the upper part of the MAIN and SUB (STEREO) carriers of the ordinary FM broadcasting. Therefore, it exerts no influence on the sound of the FM broadcasting Since RDS broadcasting has the major purpose of providing service covering movable receivers, its functions extend over a wide range, but it does not have so much applications related to ordinary audio tuners for home use.

RDS broadcasting was originated in Europe, and as things now stand it is not available in other areas.

### 2. Basic functions of RDS

As things now stand, 14 basic functions of RDS have been made public, and there is possibility of addition of new functions in the future. The 14 functions are listed in the followings.

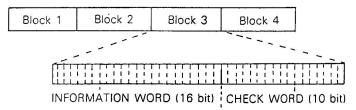
- 1 PI (Program Identification)
- ② PS (Program Service)
- ③ PTY (Program TYpe)
- TP (Identification of Traffic Program)
- ⑤ AF (Alternative Frequency List)
- ⑥ TA (Identification of Traffic Announcement)
- (7) DI (Decoder Identification)
- 8 M/S (Music/Speech Switch)
- (10) RT (Character Broadcasting)
- 11) EON (Information on Other Networks)
- 12) TDC (Transparent Data Channel)
- (13) IH (In House Application)
- (4) CT (Clock Time and Date)

It is presumed that most of these functions target movable receivers.

The receivers announced this time (KR-V6050/V7050) use five functions, (1), (2), (3), (5) and (4).

### 3. RDS data format

RDS data are transmitted continuously in by arranging them in units (groups) of 104 bits. Each 104-bit data unit (group) consists of 4 blocks, and each block consists of 26 bits of data. Each 26-bit data block consists of 16-bit information word and 10-bit check word. The construction of the data group and data blocks are shown below.



Since the 10-bit check word is the data for error detection, its detailed description is omitted. The 16-bit information word is the data to realize the RDS functions.

### 1) Block 1

This 16-bit data represents the PI code. In all groups, block 1 is the PI (identification) code of the broadcasting station carrying out RDS broadcasting.

### 2 Block 2

This 16-bit data contains information of various kinds. The most basic information is the group type code (4-bit), and indicates the type of the group which the block in question is contained in. Moreover, there is also the Bo code (1 bit) which indicates the version of the group. The type of the group becomes clear from this 5-bit data. Thus, there are basically 32 types of groups consisting of XA and XB (X = 0 to 15). Block 2 of all groups contains this code.

Another basic data is the TP data (1 bit) and the PTY data (5 bit), where TP is the traffic program identification code and PTY is the type code of the broadcasting program. Also these data are contained in Block 2 of all groups.

The remaining 5 bits have different uses, depending on the group type code.

### 3 Block 3

Block 3 has different uses, depending on the group type code. It must be remembered, however, that the same contents as Block 1 (PI code) are sent in the case of group type XB (X = 0 to 15).

# CIRCUIT DESCRIPTION

# 4 Block 4

Block 4 has different uses, depending on the group type code.

As can be seen, the use of the last 5 bits of Block 2 and the use of data of Block 3 and Block 4 depends of the group type data of the first 5 bits of Block 2.

### 4. Description of the functions of RDS

Only the following RDS functions used in the receivers KR-V6050/7050 (hereinafter KR-V) featuring RDS.

- 1. PI (Program Identification)
- 2. PS (Program Service)
- 3. PTY (Program Type)
- 4. AF (List of Alternative Frequencies)
- 5. CT (Clock time and Date)

# 4-1. PI (Program Identification) function

As mentioned previously in "3. RDS Data Format", PI code is contained in all groups, and therefore data determination does not take so much time.

The PI code is an important data because it is the broadcasting station identification code, but the PI code itself does not realize any function. This time the PI code is used to determine the synchronization of RDS and to check the coincidence of the broadcasting station during AF search (described later on).

# 4-2. PS (Program Service) function

In the case of Groups Type 0A and Type 0B, PS data consists of the last 2 bits of Block 2 and the totality of Block 4 (2 bytes). Since PS data has (8-column × 1 BYTE) composition, it is necessary to road at least 4 times from 0A to 0B until reading all columns, and the determination of data requires relatively long time. Moreover, the indication requires some time to change over, because it changes over after the entry of all columns and the determination of the data.

The PS function indicates the broadcasting station name, and the indication mode is switched to the PS indication mode when RDS broadcasting is received and the PS indication mode when RDS broadcasting is received and the PS data is determined.

The indication mode has the following order of priority:

- 1 PS indication
- ② SNPS indication
- 3 Frequency indication

PS indication appears on the display when the PS data is determined, the SNPS indication appears on the display when there is no PS and there is SNPS data, and the frequency is indicated when there is no PS nor SNPS. This time the DISPLAY key is not used to switch the indication mode, and is used to confirm the contents indicated on the display in each case, instead. The PS indication, the SNPS indication, the frequency indication and the CT indication are switched cyclically, but the display returns to the original state after 5 seconds. When there is no PS data, there is no PS indication on the display even when PS indication is requested by the DISPLAY key (the display does not get in the PS indication mode).

As mentioned above, the determination of the PS data requires some time, and therefore it is impossible to carry out PS indication immediately after changing the frequency. Such being the case, frequency indication is carried out during 3 seconds after changing the frequency.

### 4-3. PTY (Program Type) function

Since PTY data is contained in all groups, in the same way as PI data, it does not take so much time for data determination. Basically, time required for data determination is the same as in the case of PI or slightly longer.

PTY is the function which identifies the type of program being broadcasted, and consists of 5-bit data. Therefore, it is possible to have 32 types, but as things now stand only 17 types have been defined (Refer to the attached sheets). This data can be used to carry out the "PTY search", which consists of searching for the broadcast the user wants to listen to.

PTY search requires a series of operations, that consist of getting in the PTY selection mode by means of the PTY key, selecting the desired PTY by means of the UP/DOWN key and the ten keys (0 to 9), and starting the search by means of the + 10 key. The mode is canceled when no key is operated within 5 seconds.

The search operation increases the frequency in steps of 100 kHz, and stops at the broadcasting station which coincides with the selected PTY. If the selected PTY is not found even when the frequency scans through the whole broadcasting band, the search operation is finished. The "NO PROG" indication is displayed for 5 seconds when the broadcasting station of the type being searched is not found

# CIRCUIT DESCRIPTION

If RDS broadcasting is being received when the PTY key is pushed in the first place, the current PTY is displayed, and the selection processing is carried out at that point. PTY search can be carried out even when the station being received is not broadcasting RDS (even when no station is being received). In this case the first PTY indication is ''NONE'' (same as PTY = 0).

# 4-4 AF (Alternative Frequency List) function

AF data consist of 2-byte data of Block 3 in the case of group type OA. Since each AF data consists of 1 byte 2 AF data are transmitted each time.

AF data refer to the alternative frequency of the station which is being broadcasted. If the AF list is prepared by gathering these data, it becomes possible to search and find another station with receiving conditions that are better than the current ones from that list, when the receiving conditions of the station which is being received becomes bad. This is the concept of "AF search".

AF search is the function to find, from the existing AF list, another broadcasting station which has receiving conditions that are better than the current ones. If the broadcasting station which is being received is an RDS broadcasting station (station carrying out RDS broadcasting), search is started when the AF key is pushed. No search is carried out, however, when there is no AF list.

In the search operation the current frequency, PI code, S (signal) level, and N (noise) level are stored in the first place as best data, and then the frequency data of the AF list are scanned. When a station is found the PI code is checked for coincidence, and if the PI coincides the receiving states (S-level, N-level) are compared. The best receiving conditions are regarded as the best data, and the best values (No. 1) and better values (No. 2) are fetched. Search operation is carried out up to the last station of the AF list, and when the whole AF list is searched, the best receiving station is determined out of the surviving best data and better data. Details are shown in the attached flowchart.

There are 2 methods to transmit the AF data, and they are called "Method A" and "Method B". They have minor differences in the order of transmission of alternative frequency data. In "Method A" alternative frequency data of a maximum of 25 stations are transmitted in succession. In "Method B" either of the pair of alternative frequencies (2 frequencies) being transmitted contains the same data as the pair transmitted next. In "Method B" the transmitted data have the following meanings, depending on how they are transmitted.

(PATTERN 1): The TUNING frequency is the data composing the pair, and we have f1 < f2.

In this case both 88.1 MHz and 101.0 MHz stations have the same PI, and these data are fetched in the AF list. Therefore, these frequencies are submitted to AF search.

(PATTERN 2): The TUNING frequency is the data composing the pair, and we have f1 > f2.

In this case the 89.0 MHz and 93.7 MHz stations have different PI (local broadcasting), and these data are not fetched in the AF list. Therefore, these frequencies are not submitted to AF search.

(PATTERN 3): The TUNING frequency is not the data composing the pair.

Since in this case the main station (91.0 MHz) outputs the AF list for the 93.4 MHz substation, this AF list is not the AF (alternative frequency) of the station that is being received. It is the data for the substation without RDS broadcasting facilities. Therefore, no AF search is carried out with these frequencies.

# **CIRCUIT DESCRIPTION**

### 4-5. CT (clock time and date) functions

The CT (clock) function transmits the current year/month/day as well as minute/second as RDS data.

The feature being used this time decodes only the hour and minute. CT data are transmitted once every minute. Therefore, misreading of a code may result into serious misindication on the display. As a countermeasure to cope with that problem, clock count is carried out inside the microcomputer concurrently with the fetching of the CT data. When CT data is not received for 5 minutes or one, clock count is stopped.

When CT data is entered correctly 3 successive times, clock count is started inside the microprocessor and indication of the clock on the display becomes possible. After

that, the clock counter inside the microprocessor is corrected when CT data is received, and the clock counter inside the microcomputer is advanced by 1 minute when no CT data is received after the passage of 1 minute. Since ceramic clock is used instead of crystal oscillator in the receiver microprocessor being used this time, there is possibility of error of a few seconds when it is counted during 5 minutes with no correction. Therefore, when no CT data is received for 5 minutes, the clock data is cleared and the clock count by the microprocessor is stopped.

The clock indication is changed over by means of the DISPLAY key, but the indication returns to the original state after 5 seconds. There is no CT indication when there is no clock data and when no RDS broadcasting is being received.

# APPENDIX PTY Data Table

No.	PTY Code	Programme Type	PTY Display	Ten Key	UP/DOWN
0	00	No programme type or undefined	NONE	_	
1	10	Pop music	POP M	1	0
2	11	Rock music	ROCK M	2	0
3	12	M.O.R. music	M.O.R. M	3	0
4	13	Light classical	LIGHT M	4	0
5	14	Serious classical	CLASSICS	5	0
6	15	Other music	OTHER M	6	0
7	01	News	NEWS	7	0
8	02	Current Affairs	AFFAIRS	8	0
9	03	Information	INFO	9	0
10	04	Sport	SPORT	0	0
11	05	Education	EDUCATE	_	0
12	06	Drama	DRAMA		0
13	07	Culture	CULTURE	-	0
14	08	Science	SCIENCE	_	0
15	09	Varied	VARIED	-	0
16-30	16-30	Not yet assigned	NONE		_
31	31	Alarm	ALARM		-

# CIRCUIT DESCRIPTION

# Dolby Pro-Logic Surround Matrix Decoder: SSM-2126 (X14: IC301)

### **FEATURES**

Noise Generator and Autobalance Circuits are Contained On-Chip

Autobalance On/Off Control

4-Channel Pro-Logic and Dolby 3 (Surround Channel Defeat) Modes Available

Selectable Center Channel Modes—Normal, Wideband, Phantom, Off

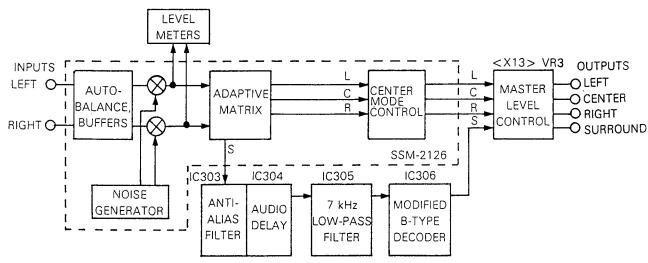
Direct Path Bypass (Normal 2-Channel Stereo Mode) Wide Channel Separation

Any Channel to Another—25 dB min Wide Dynamic Range—103 dB typ Low Total Harmonic Distortion—0.02% typ Available in a 48-Pin Plastic DIP CMOS and TTL Compatible Control Logic

### **APPLICATIONS**

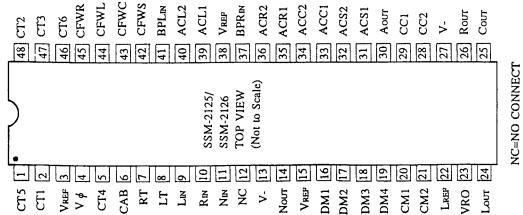
Direct View and Projection TV
Integrated A/V Amplifiers
Laserdisc and CD-V Players
Video Cassette Recorders
Stand-Alone Surround Decoders
Home Satellite Receiver/Descramblers

### FUNCTIONAL BLOCK DIAGRAM



 Dolby is a registered trademark of Dolby Laboratories Corporation, San Francisco, California.

### PIN CONNECTIONS



# CIRCUIT DESCRIPTION

### PIN DESCRIPTION

Pin Number	Name	Function	
1	CT5	Long Time Constant, C/S	
2	CT1	Short Time Constant, L/R Comparators	
3	VREF	Reference Voltage: Ground or Pseudoground	
4	V +	Positive Supply	
5	CT4	Short Time Constant, C/S Comparators	
6	CAB	Autobalance Time Constant	
7	RT	Buffered, Autobalanced Right Channel Signal	
8	LT	Buffered, Autobalanced Left Channel Signal	
9	Lin	Left Channel Input	
10	RIN	Right Channel Input	
11.	Nin	Filtered Noise Input	
12	NC	Do Not Connect	
13	V -	Negative Supply (Ground in Single Supply)	
14	Nout	Noise Output	
15	VREF	Reference Voltage: Ground or Pseudoground	
16	DM1	Digital Operating-Mode Control Input	
17	DM2	Digital Operating-Mode Control Input	
18	DM3	Digital Operating-Mode Control Input	
19	DM4	Digital Operating-Mode Control Input	
20	CM1	Digital Center-Mode Control Input	
21	CM2	Digital Center-Mode Control Input	
22	Lref	Logic Reference Voltage (Threshold = Lref + 1.4 V)	
23	VRO	VREF Out—Pseudoground Output	
24	Lour	Left Channel Output	
25	Соит	Center Channel Output	
26	Rout	Right Channel Output	
27	V <i>-</i>	Negative Supply (Ground in Single Supply)	
28	CC2	Center Normal-Mode Filter Input (Z = $15 \text{ k}\Omega$ )	
29	CC1	CC1 Center Normal-Mode Filter Output	

### Control States for DM1 - DM4 (PIN NO. 16~19)

DM1	DM2	DM3	DM4	Operating State	Function
1	1	1	1	Dolby + Channel (''Pro- Logic''), Autobalance On	•
1	1	0	1	Dolby + Channel (''Pro- Logic''), Autobalance Off	X
1	0	1	1	Dolby 3-Channel ("Dolby 3"), Autobalance On	
1	0	0	1	Dolby 3-Channel ("Dolby 3"), Autobalance Off	X
0	1	1	1	Surround Channel Noise	
0	1	1	0	Right Channel Noise	
0	1	0	1	Center Channel Noise	
0	1	0	0	Left Channel Noise	
0	0	Х	1	Mute	X
0	0	1	0	Stereo Bypass, Auto- balance On	Х
0	0	0	0	Stereo Bypass, Auto- balance Off	X

Pin Number	Name	Function			
30	Sout	Surround Channel Output			
31	ACS1	Surround Channel Steering Signal AC Coupling and High-Pass Filter			
32	ACS2	Surround Channel Steering Signal AC Coupling and High-Pass Filter			
33	ACC1	Center Channel Steering Signal AC Coupling and High-Pass Filter			
34	ACC2	Center Channel Steering Signal AC Coupling and High-Pass Filter			
35	ACR1	Right Channel Steering Signal AC Coupling and High-Pass Filter			
36	ACR2	Right Channel Steering Signal AC Coupling and High-Pass Filter			
37	BPRIN	Filtered Right Channel Input to Steering Signal Generator			
38	VREF	Reference Voltage: Ground or Pseudoground			
39	ACL1	Left Channel Steering Signal AC Coupling and High-Pass Filter			
40	ACL2	Left Channel Steering Signal AC Coupling and High-Pass Filter			
41	BPLin	Filtered Left Channel Input to Steering Signal Generator			
42	CFWS	Surround Channel Full-Wave Rectifier Low-Pass Filter			
43	CFWC	Center Channel Full-Wave Rectifier Low- Pass Filter			
44	CFWL	Left Channel Full-Wave Rectifier Low-Pass Filter			
45	CFWR	Right Channel Full-Wave Rectifier Low- Pass Filter			
46	СТ6	Short Time Constant, C/S			
47	CT7	Shot Time Constant, L/R			
48	CT2	Long Time Constant, L/R			

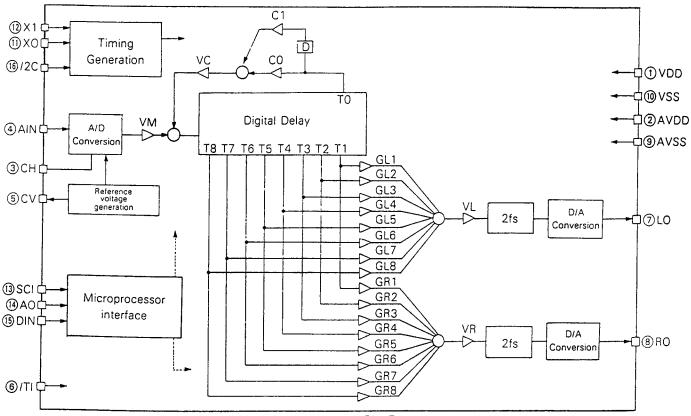
# Center Channel Functional Modes (PIN NO. 20, 21)

CM1	CM2	Mode	Function
0	0	Center Channel Off	X
0	1	Center Channel Wideband	
1	0	Phantom Center Channel	
1	1	Normal Center Mode	

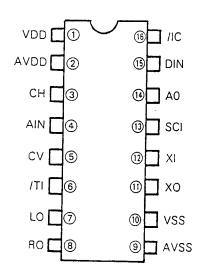
0: L 1: H X: H or L

CIRCUIT DESCRIPTION
Digital delay IC: YM7128B (X14: IC304, 402)

## Si-Gate CMOS PROCESS LSI



Pin connection



Pin Function description

Terminal No.	Terminal name	1/0	Function
1	VDD	-	Digital system +5 V power supply
2	AVDD	_	Analog system +5 V power supply
3	СН	0	Sample holding capacitor add-on terminal
4	AIN		Analog signal input terminal (Entered by CV voltage reference).
5	CV	0	A/D conversion reference voltage output
6	/TI	1+	Test input terminal (Nor-mally unconnected)
7	LO	0	L-channel output (Analog output)
8	RO	0	R-channel output (Analog output)
9	AVSS	_	Analog system ground
10	VSS	_	Digital system ground
11	хо	0	Crystal oscillator (standard 7.16 MHz) connection
12	ΧI	ŧ	(XI is the analog input ter- minal when using external clock)
13	SCI	I	Data shift clock input terminal
14	AO	ı	Address/data identification signal input terminal
15	DIN	ı	Data input terminal
16	/IC	l ÷	Initial clear terminal

37

# KR-V6050/7050 CIRCUIT DESCRIPTION

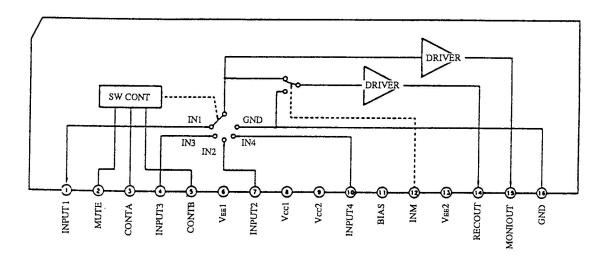
Video amp. selector: CXA1558L (X09: IC2) Strong points

- 4-input, 2-output
- Low crosstalk Typ-70 dB
- Two built-in 75-Ohm driver systems with even voltage gain characteristics
- Built-in mute function
- One of the 2 output systems provided with inhibit (mute) function

### Construction

· Bipolar monolithic IC

# Block diagram and terminal layout diagram



# CIRCUIT DESCRIPTION

# Pin Description

Terminal Number	Terminal name	Terminal voltage (V)	Equivalent circuit	Terminal description
1 4	INPUT1	0	25 <sub>µ</sub> 1	Signal input terminal. The standard input level is 1 $V_{p,p}$ . The input resis-
7	INPUT2	0	130	tance is 40 KΩ each. (Normally, these terminals should be grounded
10	INPUT4	0	4 40k ₹ \$20k 1 300µ GND VEE	with $75\Omega$ when using).
2	MUTE	0≦L≦1.5* H≧3.5*	Vcc 2 50k	This is the control terminal to mute the input signal. The mute function is canceled when this terminal is stuck to Low.  All input signals are muted simultaneously when this terminal is stuck to HIGH. At that time, the output voltages of the terminals (4) and (5) are stuck to the GND potential.
12	ниі	0≦L≦1.5° H≧3.5°	12 2.5V THE	Control terminal for Inhibit to output of (4) pin. The inhibit function is canceled when this terminal is stuck to LOW. The inhibit (mute) operation is carried out when this terminal is stuck to HIGH, and the output voltage of the terminal (4) is stuck to the GND potential.
3 5	CONTA CONTB	0≦L≦1.5° H≧3.5°	3 50k Vcc 3 50k T 2.5v	Control terminal for input selection. One out of INPUT1 to INPUT4 is selected through the combination of LOW and HIGH of CONTA and CONTB. (For details refer to the output value list).
6	Vee 1	-5*	_	Negative power supply terminal of the switch unit.
8	Vcc 1	5*		Positive power supply terminal of the switch unit
9	Vcc 2	5*		Positive power supply unit of the driver unit.
11	BIAS	0.	130 VCC  130 SOR 150p  GNO VEE	This terminal is used by grounding it. (Terminal for IC test).
13	Vii 2	-5*	_	Negative power supply terminal of the driver unit.

## **CIRCUIT DESCRIPTION**

Terminal Number	Terminal name	Terminal voltage (V)	Equivalent circuit	Terminal description
14	RECOUT	0	Vcc 600 µ 1 14 12.6m 15	Signal output terminal. The standard output level is 1 V <sub>2-0</sub> when terminated with 75Ω. The signal selected by the control terminal out of INPUT1 to INPUT4 is outputted. This terminal is outputted the GND potential when the terminal (12) is stuck at HIGH. The 75Ω load can be driven directly.
15	MINIOUT	0	GNO TIM	The standard output level is 1 $V_{\rm int}$ when termiknated with 75 $\Omega$ . The signal selected by the control terminal out of INPUT1 to INPUT4 is outputted. The 75 $\Omega$ load can be driven directly.
16	GND	0*	_	GND terminal.

<sup>\*</sup> External Input terminal voltage

### In/Output value list

	Contro	0	utput						
CONTA	CONTB	MUTE	INH	RECOUT	MONIOUT				
③ PIN	⑤ PIN	② PIN	① PIN	(14) PIN	(15) PIN				
L	L			Input signal to INPUT1					
L	Н			Input signal to INPUT3					
Н	L	L	L				, L	Input sign	al to INPUT2
Н	Н			Input signal to INPUT4					
•	•	Н		GND voltage level					
L	L				Input signal to INPUT1				
L	Н	,			Input signal to INPUT3				
- Н	L		Н	GND voltage level	Input signal to INPUT2				
Н	Н				Input signal to INPUT4				
•	•	Н		and the second second	GND voltage level				

Don't Care

0≦L≦1.5 V H≥3.5 V

### **CIRCUIT DESCRIPTION**

## 7. Compressor/Expandor IC: NE571N (X14: IC302)

### 7-1. Analog converter circuit

The S/N ratio is lowered due to the digital delay circuit. To offset this, a noise reduction is applied.

The signal is compressed down to half the dynamic range by the compressor circuit and is passed through a digital delay circuit. After that, it is expanded to twice by the expandor circuit to ensure the original dynamic range.

The  $\mu$ PC1571C is a high-performance integrated circuit capable of constituting a high-percision analog converter by a lesser number of externally connected components.

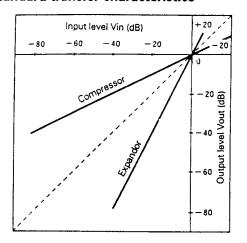
Incorporated within one paciage are a reference voltage circuit and a two-fold operation amplifier, gain cell and rectifier.

This IC can be applied to a limiter, a voltage controlled amplifier, an ordinary home-use device noise reduction circuit, etc., including a compandor as in a telephone system.

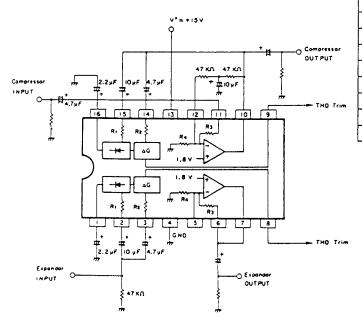
#### 7-2. Features

- Operation on single power, +6V to +16V
- With built-in identical circuits of 2 channels, a compandor can be formed by one package.
- Dynamic range, approx. 70dB
- Distortion rate adjustable

#### 7-3. Standard transfer characteristics



#### 7-4. Standard application circuit example

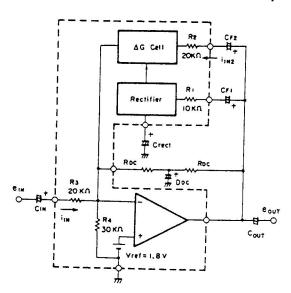


#### 7-5. Description of terminals

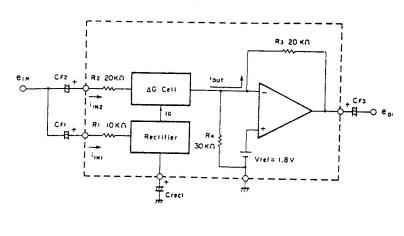
Pin No.	Function	Pin No.	Function
1	Crect1	9	THD Trim 2
2	Rect IN 1	10	OUT 2
3	ΔG Cell IN 1	11	R3 2
4	GND .	12	1: 2
5	iı 1	13	Vcc
6	R3 1	14	ΔG Cell IN 2
7	OUT 1	15	Rect IN 2
8	THD Trim 1	16	Crect2

## **CIRCUIT DESCRIPTION**

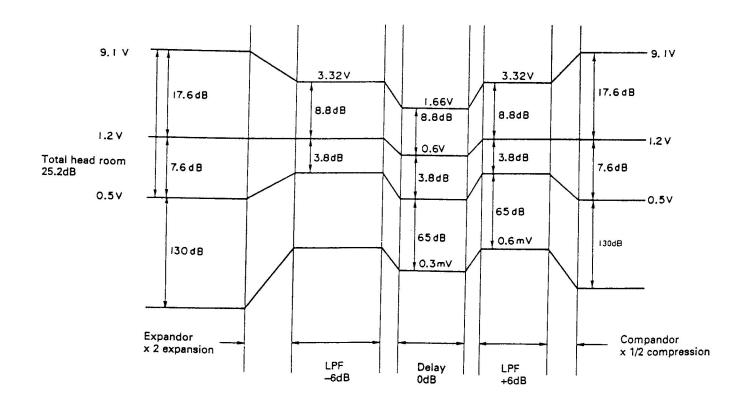
### 7-6. Compressor application circuit example



### 7-7. Operation as an expandor



### 7-8. Theoretical values of head room and noise level with compressor/expandor circuit



AM. Section: If alignment point is "—", Confirm the value.

If not. Replace the front end pack.

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FI	M SECTION	<u> </u>	SELECTOR: FM	3ETTINGS	FOINTS	<u> </u>	1
1	DISCRIMINATOR	(A) 98.0 MHz 1 kHz, ±75 kHz dev 60 dBμ (ANT input)	Connect a DC voltmeter between TP3 and TP4. (XI 3-)	AUTO or MONO 98.0 MHz	L2 (X14-)	0 V	(a)
2	DISTURTION (MONO) <t.e only="" type=""></t.e>	(C) 98.0 MHz 1 kHz, ±68.25 MHz dev Selector: L or R Pilot: ±6.75 kHz dev 60 dBµ (ANT input)	(8)	98.0 MHz	L9 (X14-)	Minimum distortion	
3	DISTORTION (STEREO)	(C) 98.0 MHz 1 kHz, ±68.25 kHz dev Selector: L or R Pilot: ±6.75 kHz dev 60 dBµ (ANT input)	(B)	98,0 MHz	IFT (X02-)	Minimum distortion. (L or R)	
4	SEPARATION	(C) 98.0 MHz Stereo signal 60 dB (ANT input)	(B)	AUTO 98.0 MHz	VR5 (X14-)	Minimum crosstalk	
5	TUNING LEVEL	(A) 98.0 MHz 0 dev 19 dbµ (ANT input) 75µ	(B)	AUTO or MONO 98.0 MHz	VR1 (X14-)	Adjust VR1 and stop at the point where ED1 (TUNED) goes on.	
A٨	1 SECTION	9	SELECTOR: AM				
(1)	TUNING LEVEL	(D) 1000 (999) kHz 26 dBµ (ANT input)	(8)	_	VR3 (X14-)	Adjust VR2 and stop at the point where ED1 (TUNED) goes on.	
AU	DIO SECTION						
<1>	IDLE CURRENT		(E) Connect a DC voltmeter across CP1 (L) CP2 (R) CP3 (C) (X09-)	Volume: 0	VR1 (L) VR2 (R) VR3 (C) (X09-)	10 mV (L, R) 5 mV (C)	(b)

## **REGLAGE**

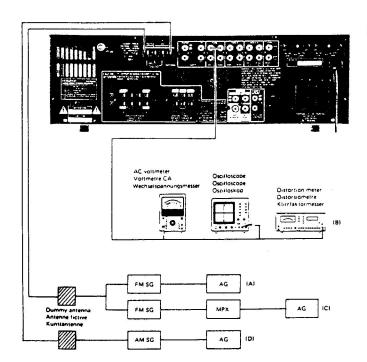
Section AM: Si le point d'alignement est \_\_, confirmer la valeur. Sinon, remplacer le bloc avac.

	Sinon, templacer le bloc avac.						
N°.	ITEM	REGLAGE DE L'ENTREE	REGLAGE DE LA SORTIE	REGLAGE DU TUNER	POINT DE L'ALIGNEMENT	ALIGNER POUR	FIG.
SECT	TION MF SELECTE	UR DES ENTRESS	S: MF			<del></del>	т
1	DISCRIMI- NATEUR	(A) 98.0 MHz 1kHz, ±75 kHz dév 60 dBμ (Entrée ANT)	Relier un volt- mètre CC entre les TP3 et TP4. (X13-)	AUTO ou MONO 98.0 MHz	L2 (X14-)	0 V	(a)
2	DISCRIMINA- TEUR (MONO) (T, E Type Seulement)	(c) 98.0 MHz 1 kHz, ±68.75 MHz dév Selection; L ou R Signal pilote: ±6.75 kHz dév 68 dBμ (Entrée	(B)	98.0 MHz	L9 (X14-)	Distorsion minimale.	
3	DISTORSION (STEREO)	(c) 98.0 MHz 1 kHz, ±68.25 kHz dév Selection: L ou R Signal pilote: ±6.75 kHz dév 60 dBμ (Entrée	(B)	98.0 MHz	IFT (X02-)	Distorsion mini- male. (L ou R)	
4	SEPARATION	(c) 98.0 MHz STEREO Signal 60 dBµ (Entrée ANT)	(B)	AUTO 98.0 MHz	VR5 (X14-)	Diaphonie minimale.	
5	NIVEAU D'ACCORDER	(A) 98.0 MHz 0 dév — 19 dBμ (Entrée ANT) 75 Ω	(B)	AUTO ou MONO 98.0 MHz	VR1 (X14-)	Ajuster VR1 et arréter le mouve- ment de VR1 au moment oú le ED1 (TUNED) s'allume.	
SECT	ION MA SELE	CTEUR: AM			r	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	
(1)	NIVEAU D'ACCORDER	(A) 1000 (999) kHz 26 dBµ (Entrée ANT)	(B)	_	VR3 (X14-)	Ajuster VR2 et le mouvement de VR4 au moment oú le ED1 (TUNED) s'allume.	
SECT	ION AUDIO						
[1]	COURANA DE POLARISATION	-	(E) Connecter un voltmètre CC sur CP1 (L) CP2 (R) CP3 (L) (X09-)	Volume: 0	VR1 (L) VR2 (R) VR3 (L) (X09-)	10 mV (L, R) 5 mV (C)	<b>(</b> b)

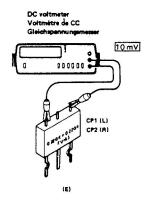
MW-Teil: Wenn der Ausrichtpunkt \_\_ ist, den Wert überprüfen. Wenn nicht, die Fronteinheit auswechseln.

Г	· · · · · · · · · · · · · · · · · · ·		1110011100	TUNED	100151011	<del></del>	
NR.	GEGENSTAND	EINGANGS- EINSTELLUNG	AUSGANGS- EINSTELLUNG	TUNER- EINSTELLUNG	ABGLEICH- PUNKTE	ABGLEICHEN FÜR	ABB.
UKW	UKW-EMPFANGSABTEILUNG EINGANGSUMSCHALTER: FM						
1	DISKRI- MINATOR	(A) 98.0 MHz 1kHz, ±75 kHz Hub 60 dB <sub>μ</sub> (ANT-Eingang)	Einen Gleich- spannungsmes- ser zwischen TP3 und TP4 auschlicßen (X13-)	AUTO oder MONO 98.0 MHz	L2 (X14-)	0 V	(a)
2	DISKRIMINA- TOR (2)	(A) 98.0 MHz 1 kHz, ±75 kHz Hub 60 dBμ (ANT-Eingang)	(B)	MONO 98.0 MHz	T3 (X05-)	Minimal Klirr- faktor.	
3	KLIRRFAKTOR (STEREO)	(c) 98.0 MHz 1 kHz, ±68.25 kHz Hub Wähler: L oder R Pilotten: ±6.75 kHz Hub 60 dBμ (ANT-Eingang)	(B)	98.0 MHz	Frontende IFT (X05-)	Minimal Klirr- faktor.	
4	STEREO KANAL TRENNUNG	(c) 98.0 MHz 1 kHz, ±68.25 kHz Hub Wähler: L oder R Pilotten: ±6.75 kHz Hub 60 dBμ (ANT- Eingang)	(B)	98.0 MHz	VR4 (X05-)	Minimales Über- sprechen. Eine Ausgleich- regelung kann notwendig sein. falls links-zu- rechts und rechts- zu-links. Trennun- gen ungleich sind.	
5	ABSTIMM PEGEL	(A) 98.0 MHz 0 Hub — 19 dBμ (ANT-Eingang) 75 Ω	(B)	AUTO oder MONO 98.0 MHz	VR1 (X14-)	Den Pegel wieder- stand aufdrehen, und dem VR1 Halt geben wobei den ED1 (TUNED) an- zeiger leuchtet wird.	
MW-E	MPFANGSABTE	LUNG Die MW	Rahmenantenne	angebracht lassen	. WAHLER: AM		
(1)	ABSTIMM PEGEL	(A) 1000 (999) kHz 26 dBµ (ANT- Eingang)	(B)	-	VR3 (X14-)	Den Pegel wieder- stand aufdrehen und dem VR2 Halt geben wobei den ED1 (TUNED) anzeiger leuchtet wird.	
AUDI	O-ABTEILUNG					•	
[1]	LEER- LAUFSTROM	_	(E) Einen Gleichspannun- gsmesser über CP1 (L) CP2 (R) anschließen. CP3 (L) (X09-)	Volume: 0	VR1 (L) VR2 (R) VR3 (L) (X09-)	10 mV (L, R) 5 mV (C)	(b)

## ADJUSTMENT/REGLAGE/ABGLEICH

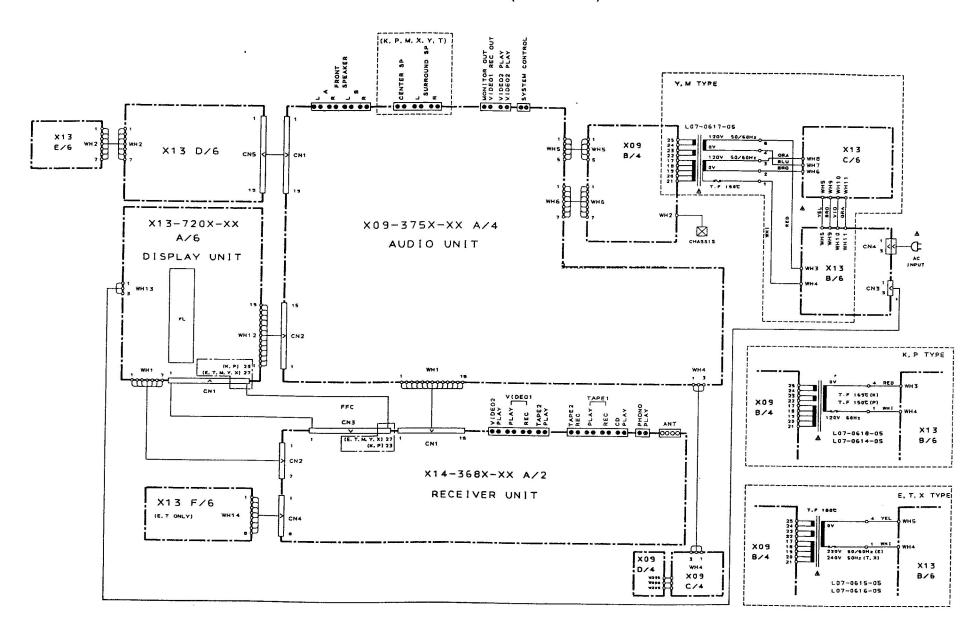


### System connections/Raccordements du système/System-Anschlusse

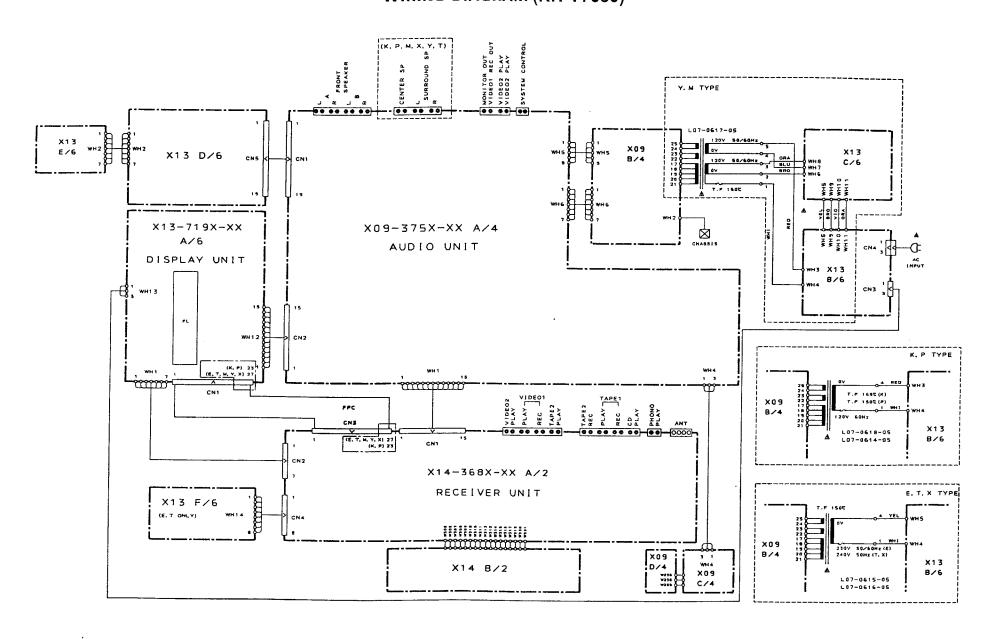


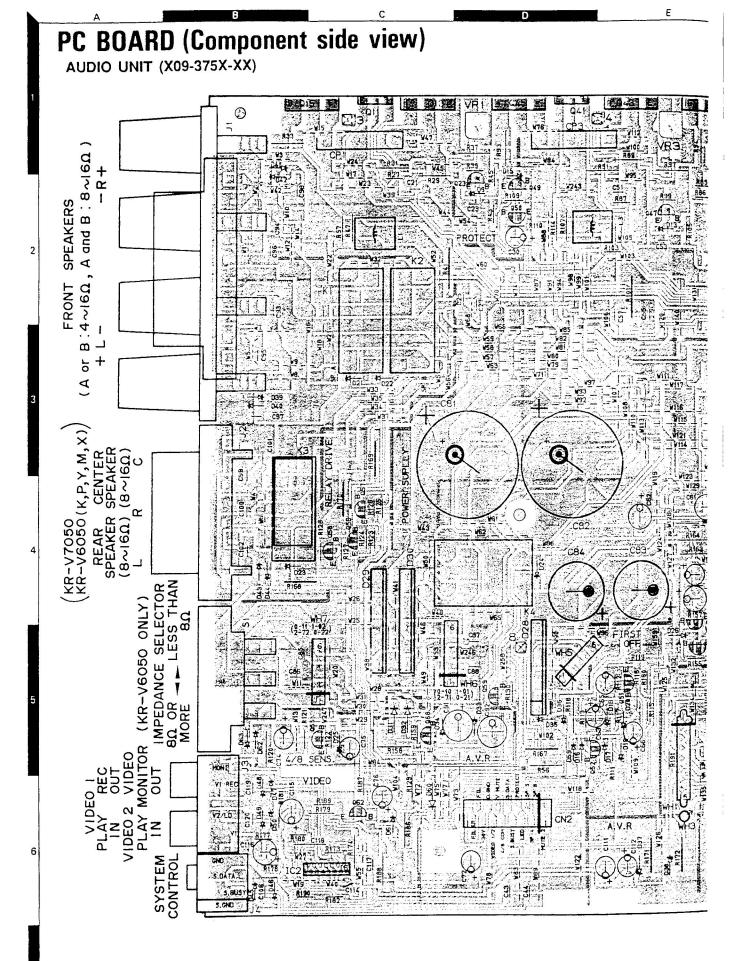
## KR-V6050/7050 KR-V6050/7050

### WIRING DIAGRAM (KR-V6050)

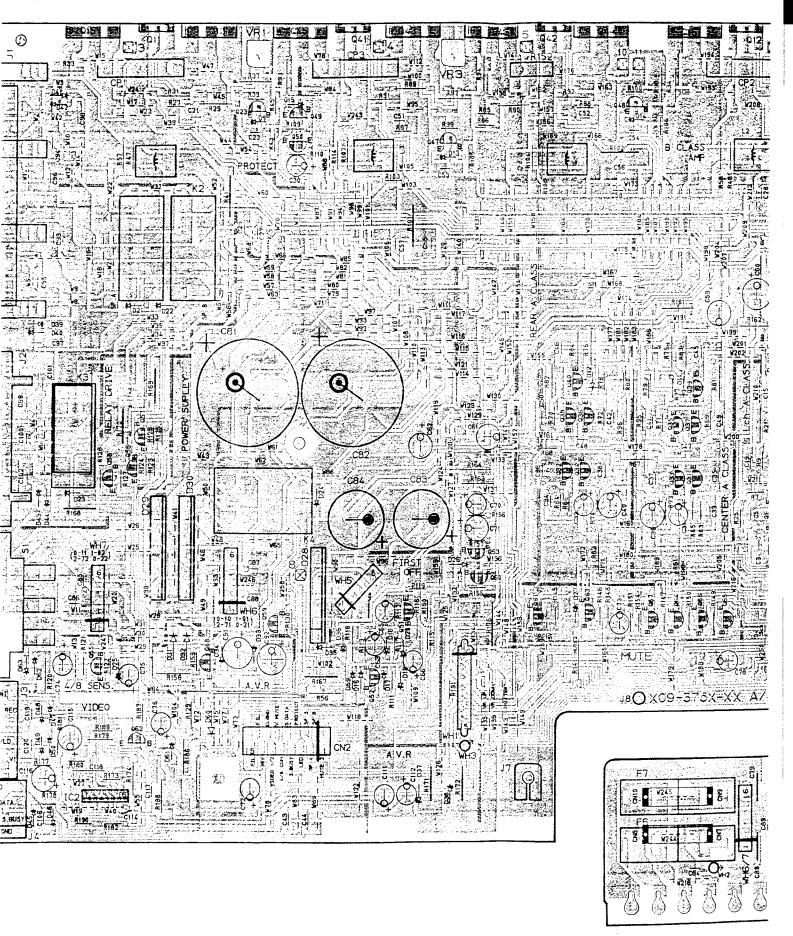


# KR-V6050/7050 KR-V6050/7050 WIRING DIAGRAM (KR-V7050)

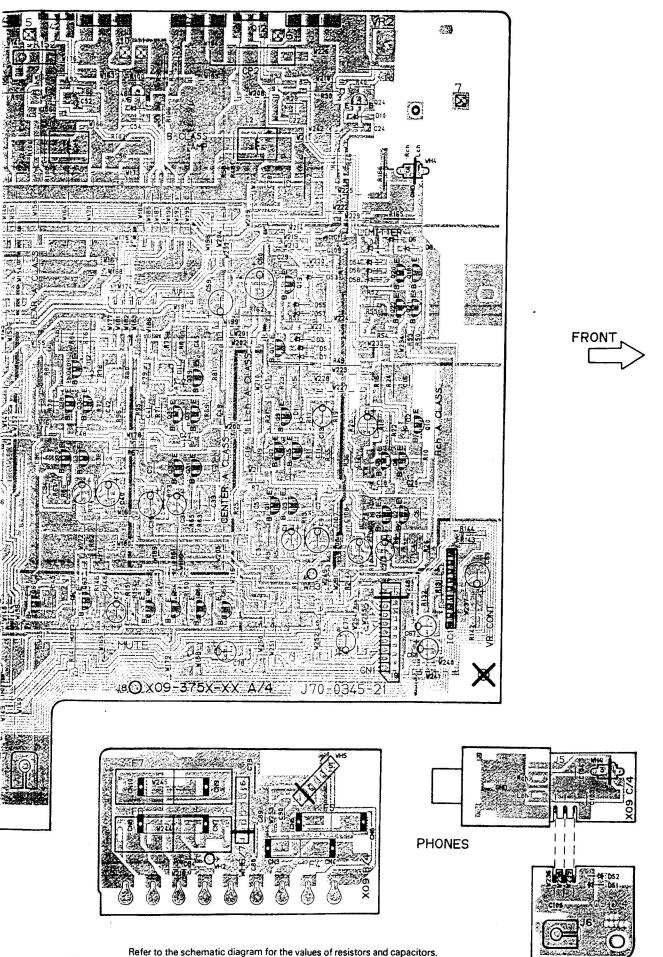




# mponent side view)



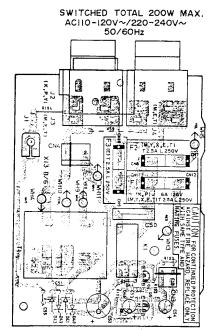


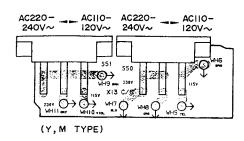


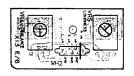
### PC BOARD (Component side view)

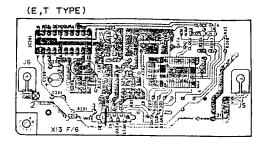
ACCESSORY UNIT (X13-720X-XX): KR-V6050

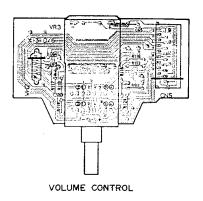
(X13-719X-XX): KR-V7050

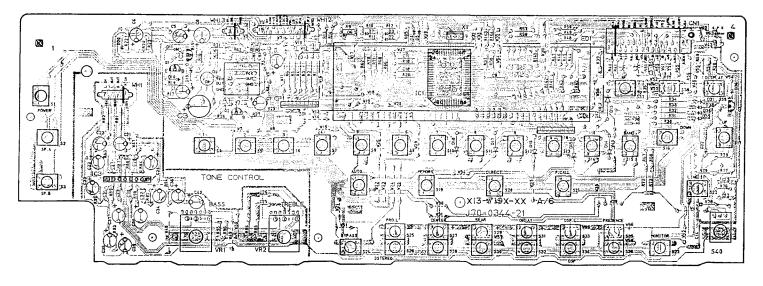








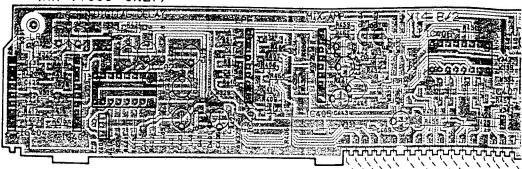




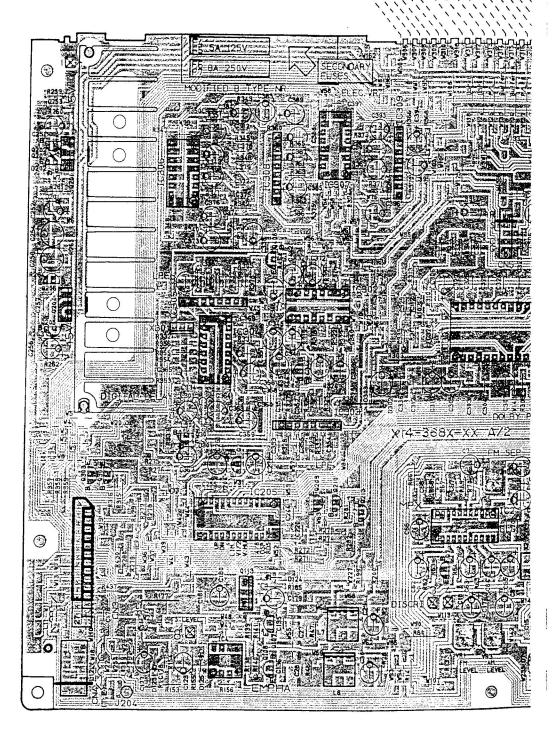


# PC BOARD (Component side view) RECEIVER UNIT (X14-368X-XX)

(KR-V7050 ONLY)

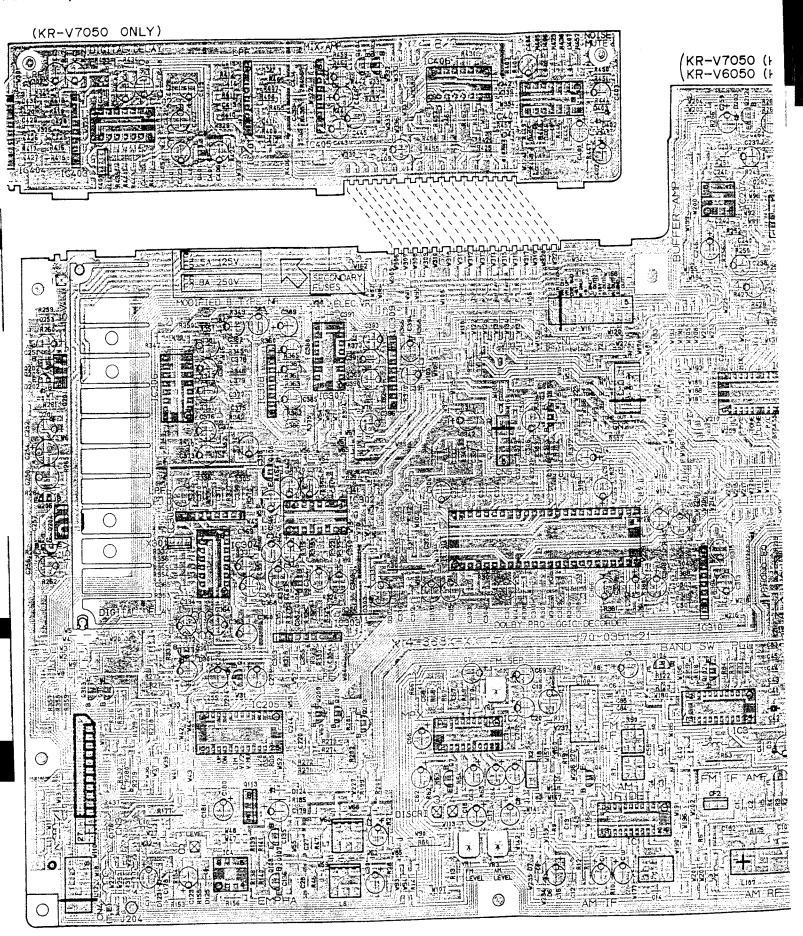


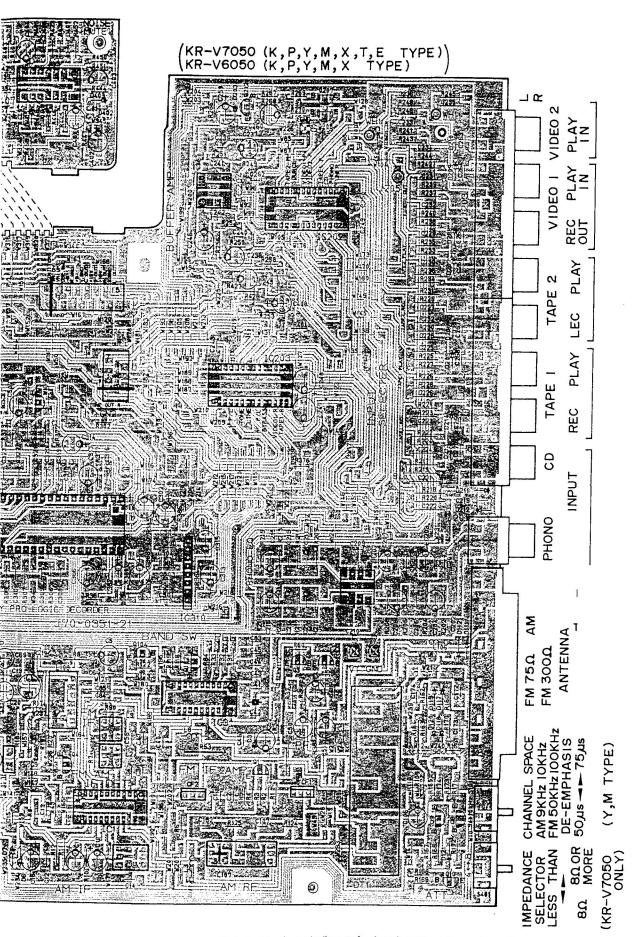


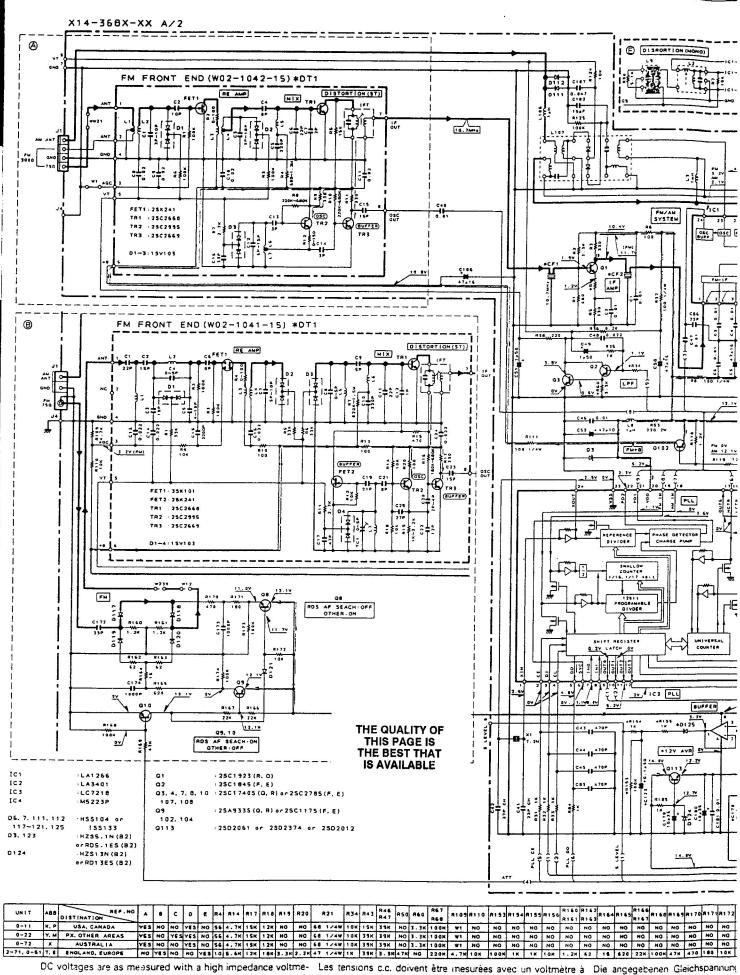


## mponent side view)

1-368X-XX)



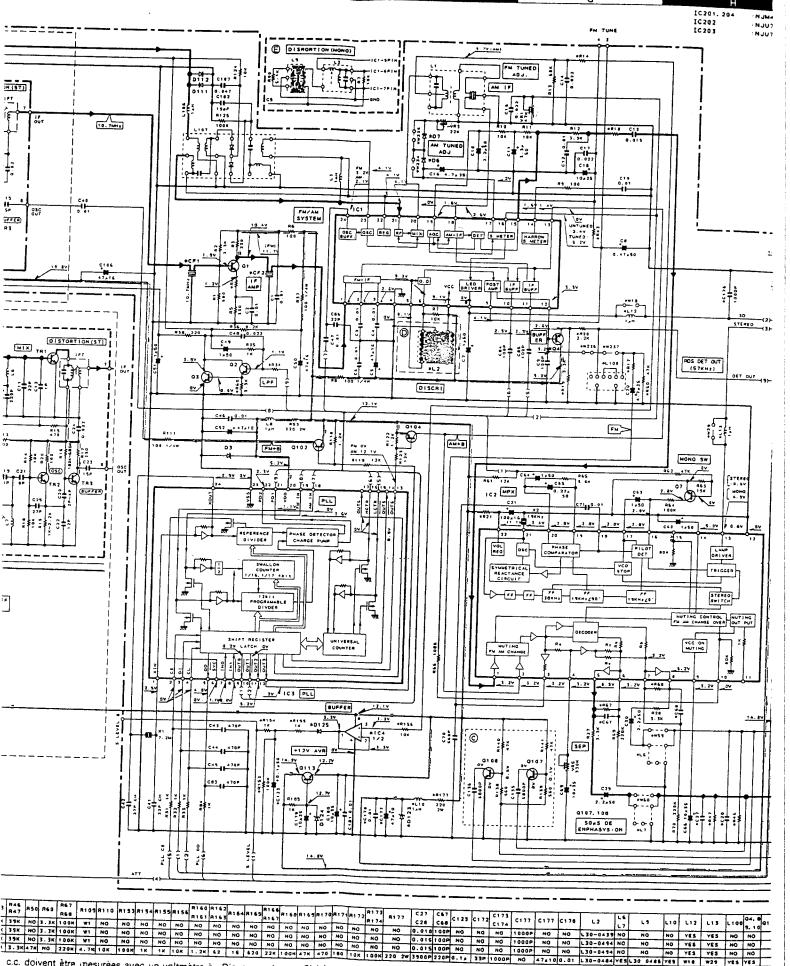




ter. Values may vary slightly due to variations between individual instruments or/and units.

haute impédance. Les valeurs peuvent différer légèrement du hochohmigen Spannungsmesser fait des variations inhérentes aux appareils et aux instruments ken die Meßwerte aufgrund von U de mesure individuels.

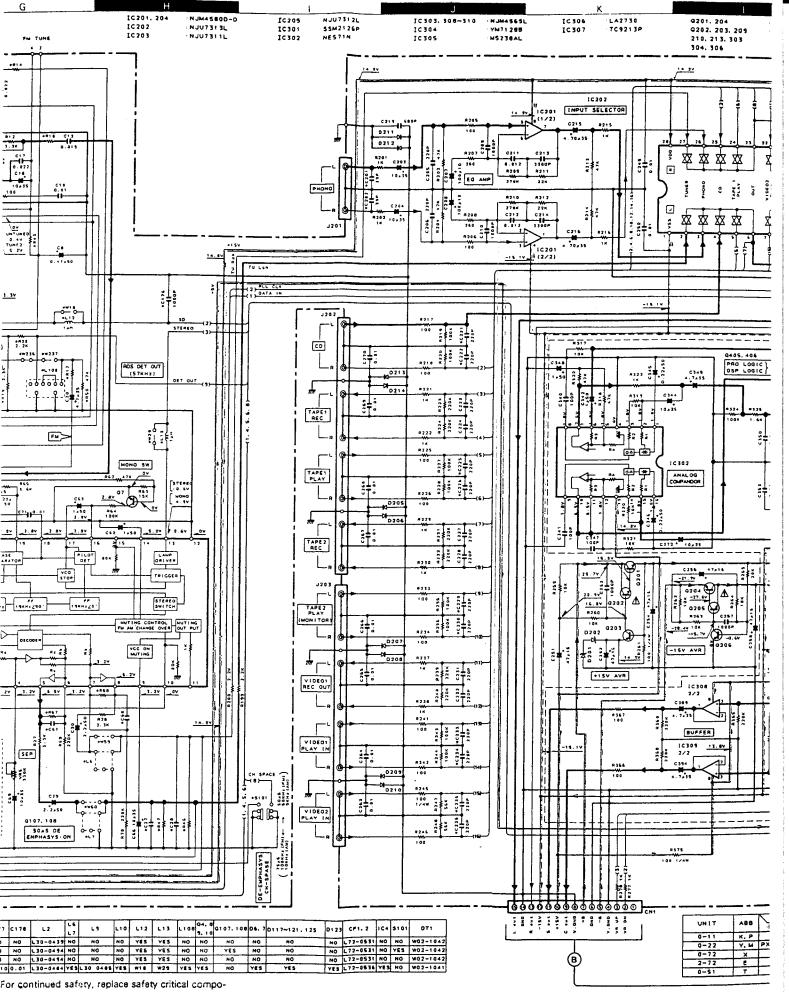
zeinen Instrumenten oder Geräten :



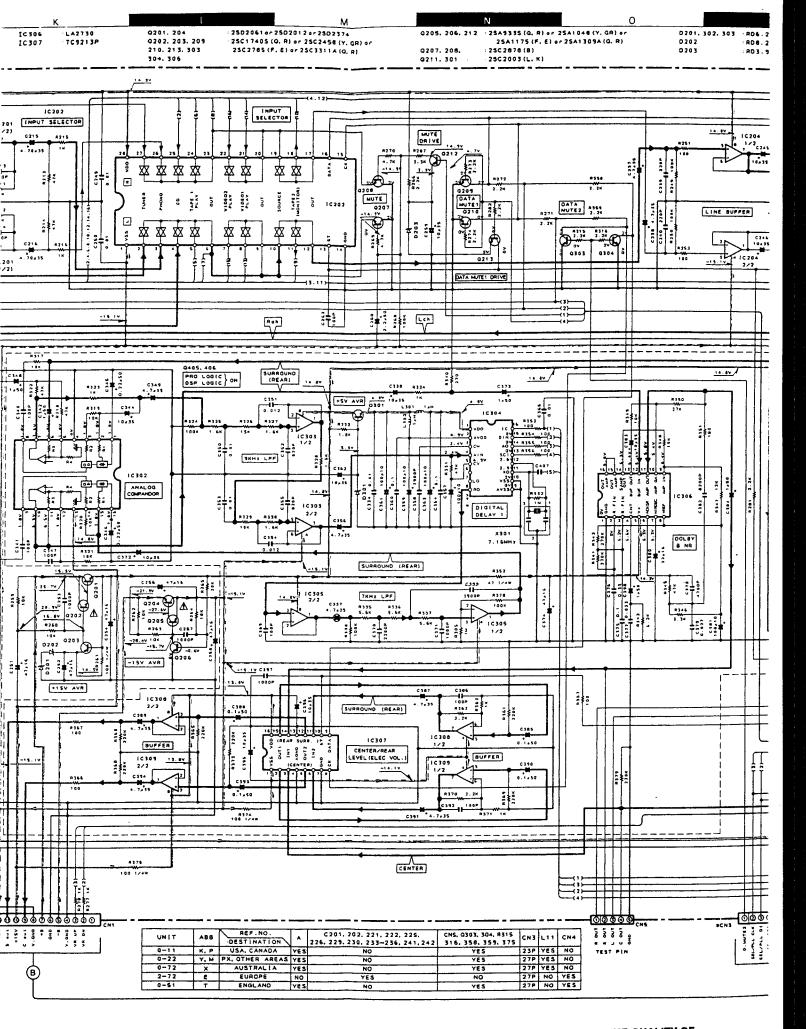
c.c. doivent être mesurées avec un voltmètre à ance. Les valeurs peuvent différer lègèrement du

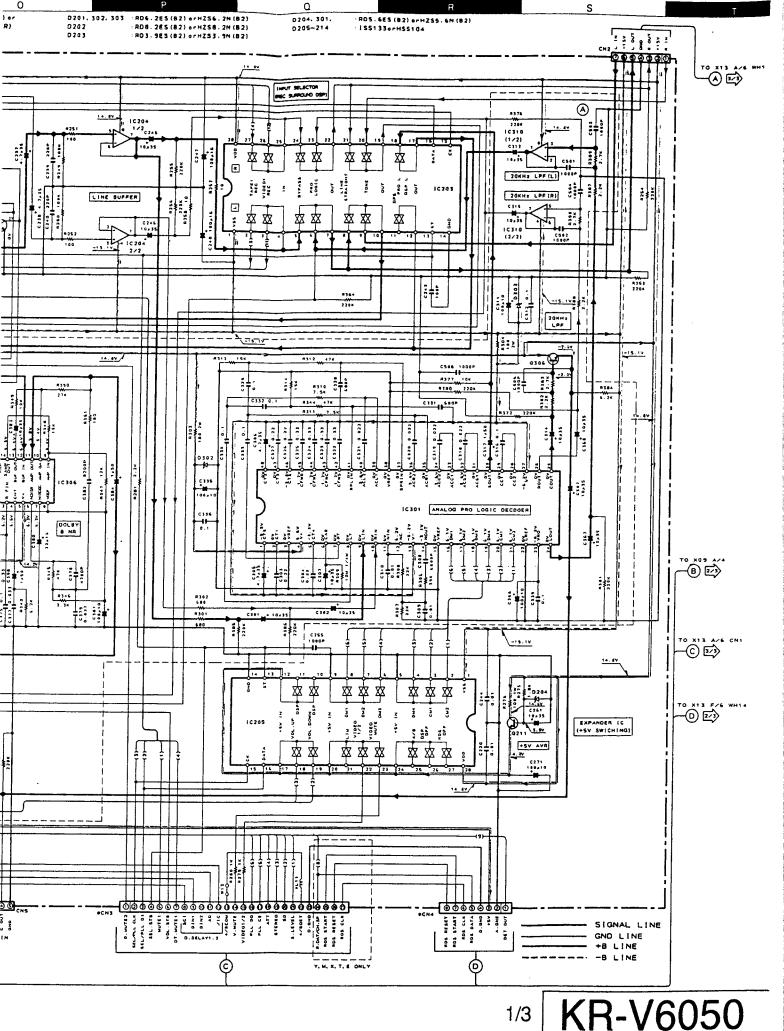
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwantions inherentes aux appareils et aux instruments ken die Meßwerte aufgrund von Unterschieden zwischen einzeinen Instrumenten oder Geräten u. U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). \Lambda Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit before the appliance is returned to the customer.

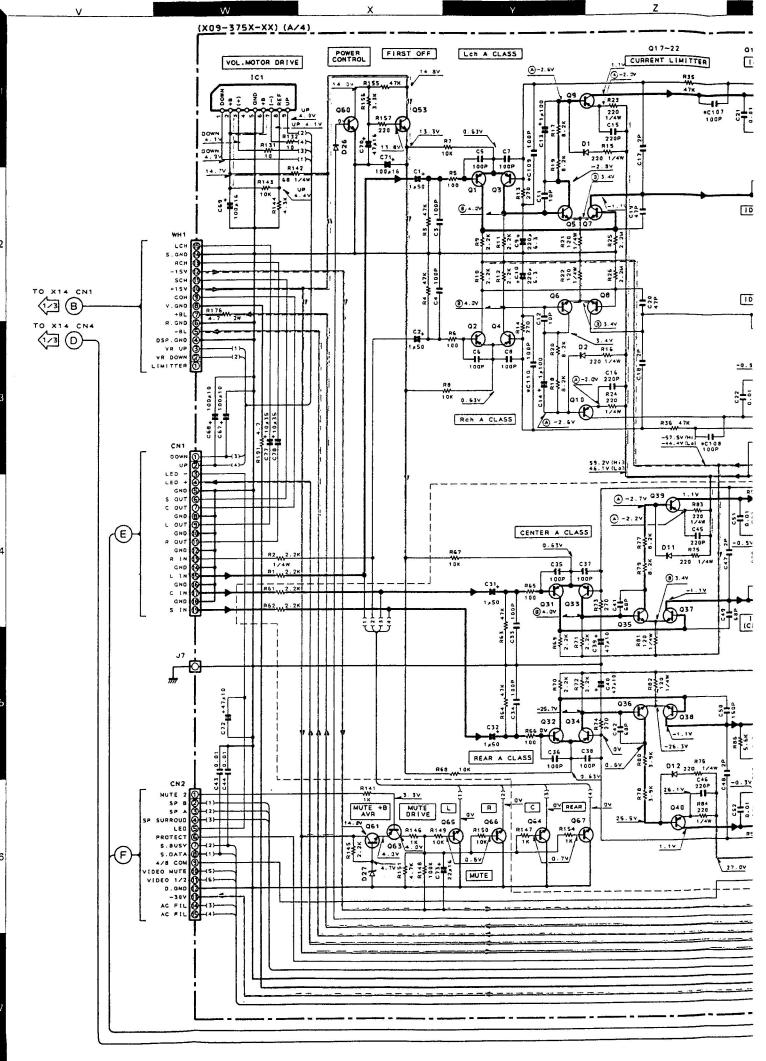


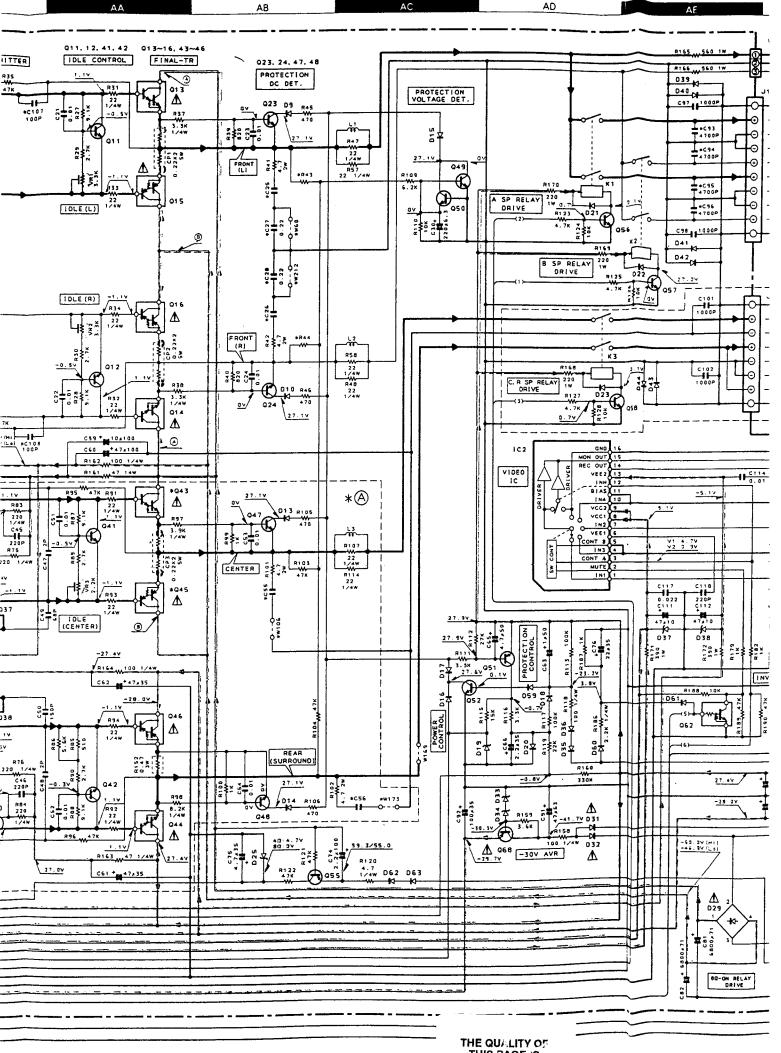
For continued sarety, replace sarety critical compowith manufacturer's recommended parts (refer to \( \) Indicates safety critical components. To reduce the \( \) shock, leakage-current or resistance measurements \( \) ed out (exposed parts are acceptably insulated from reuit) before the appliance is returned to the custom-



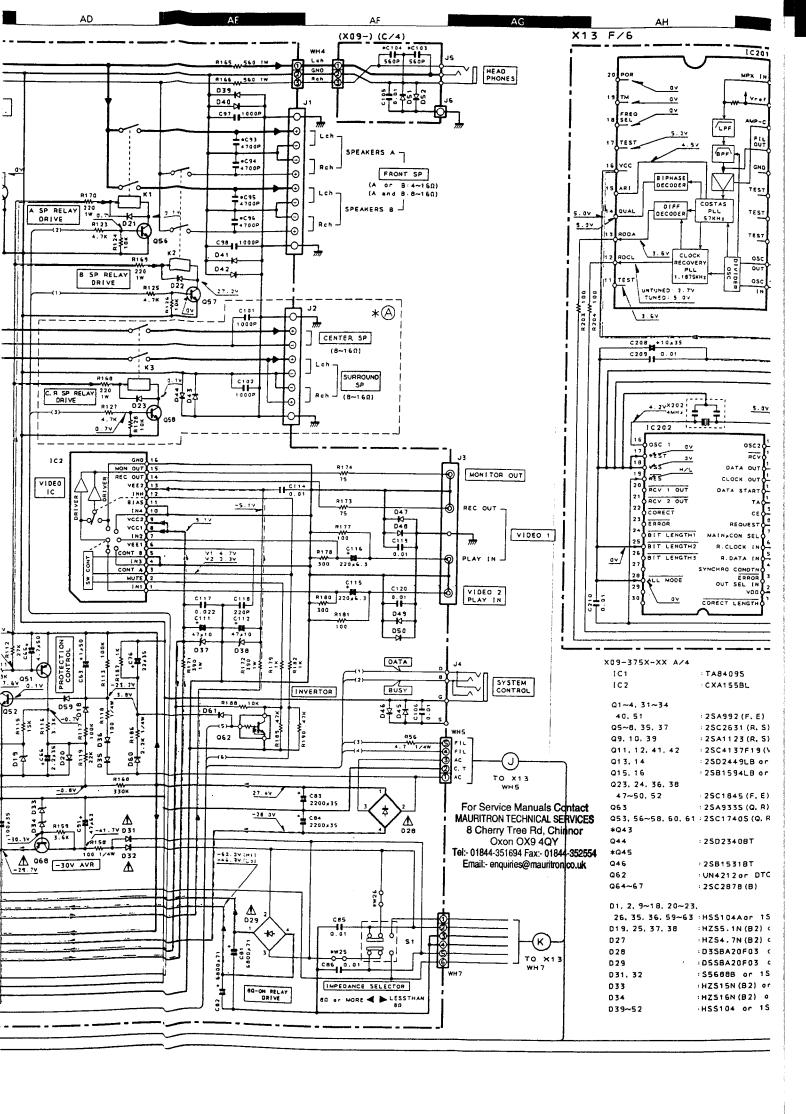


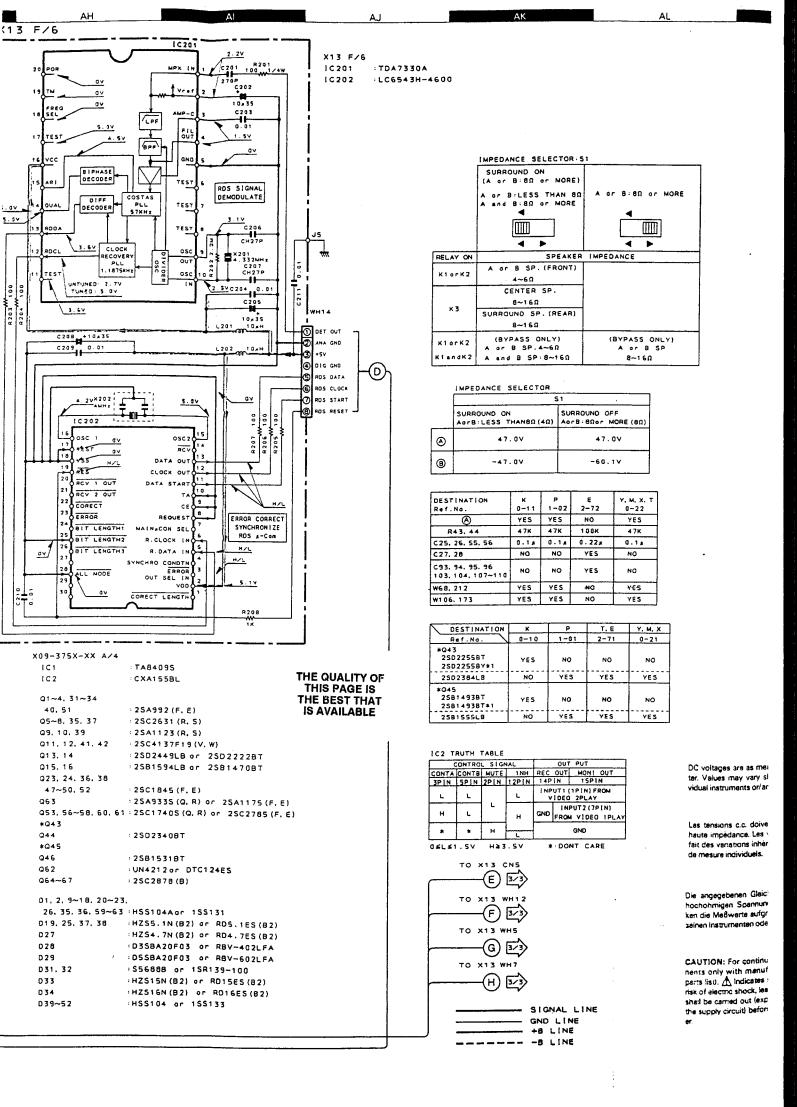
KR-V6050

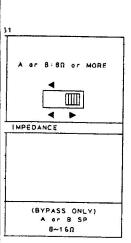




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DUND (	OFF
:8Ωor	MORE (BΩ)
47	.0٧
-60	. 1 V

E 2-72	Y. M. X. T
NO	YES
100K	47K
1.22#	0.14
YES	NO
YES	NO
NO.	YES
NO	YES

$\perp$	T, E	Y. M. X
1	2-71	0-21
	NO	NO
4	YES	YES
	NO	NO
-	YES	YES

JT	-
IONI	OUT
ISPIN	4
IN) FR	OM
2 (7P	lN)
IDEO	TPLAY
in.	

CARE

INE

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmêtre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u. U. genngfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts trefer to parts list). A Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit before the appliance is returned to the custom-



2SA992 2SC1845 2SC1923 2SC2003 2SC2631 2SC2878 2SC3940A



DTC124ES 2SA1048 2SA933S 2SC1740S 2SC2458



UN4212 2SA1309A 2SC3311A

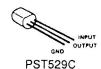




TA8409S



M5223P NJM4580D-D







2SB1493BT 2SB1493BT\*1 2SB1531BT 2SD2255BT 2SD2255BT\*1 2SD2340BT



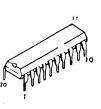
2SB1470BT 2SD2222BT



2SD2012 2SD2374



LA2730



TDA7330A



Farananana)

LA3401



2SA1175 2SC2785



2SD2061



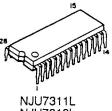
**NE571N** 



TC9213P TC9215P



YM7128B

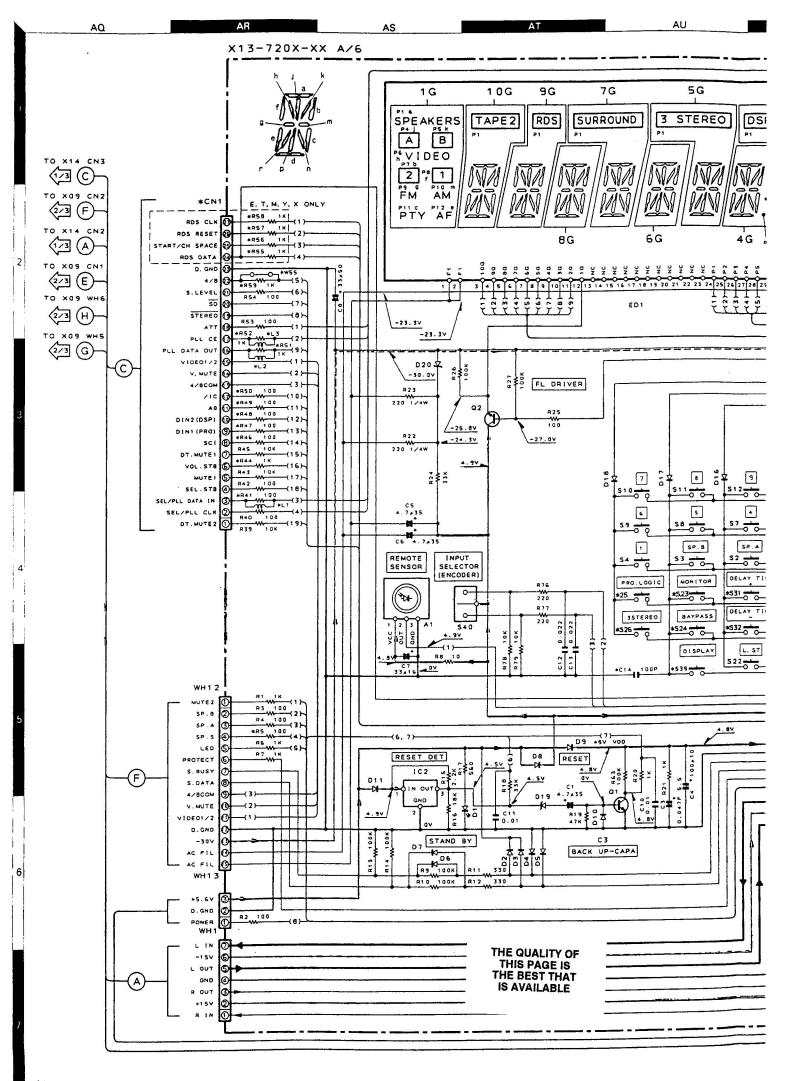


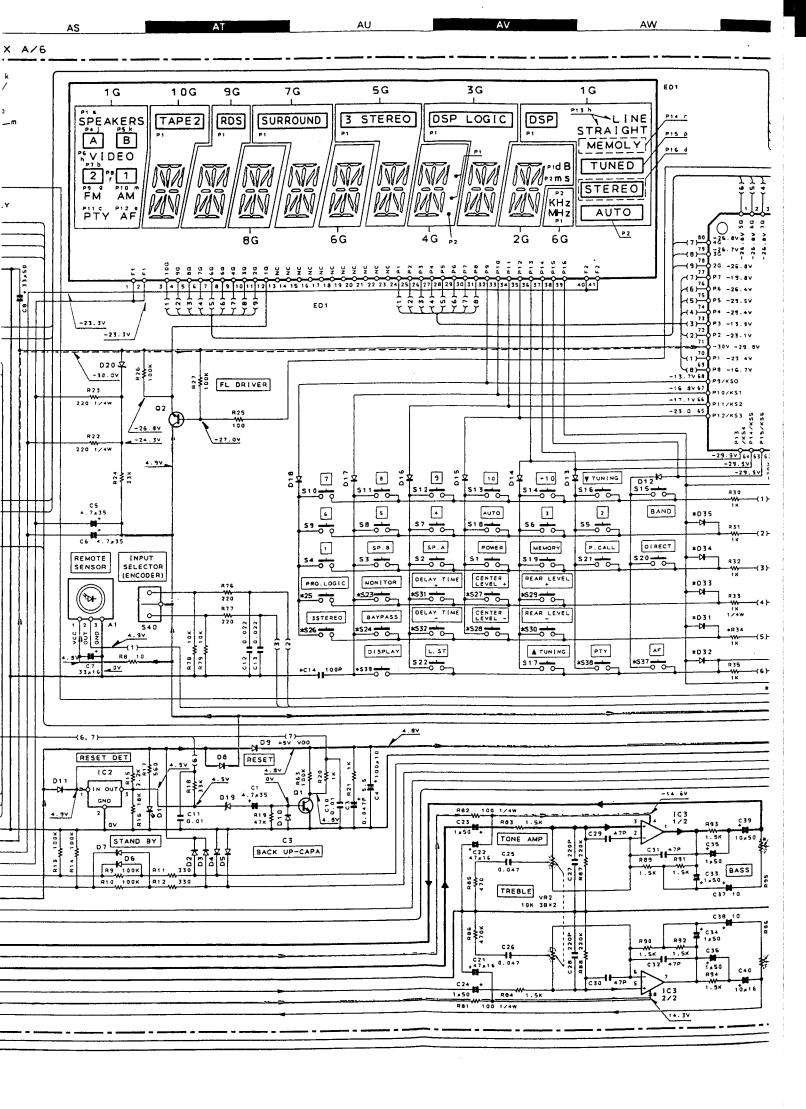
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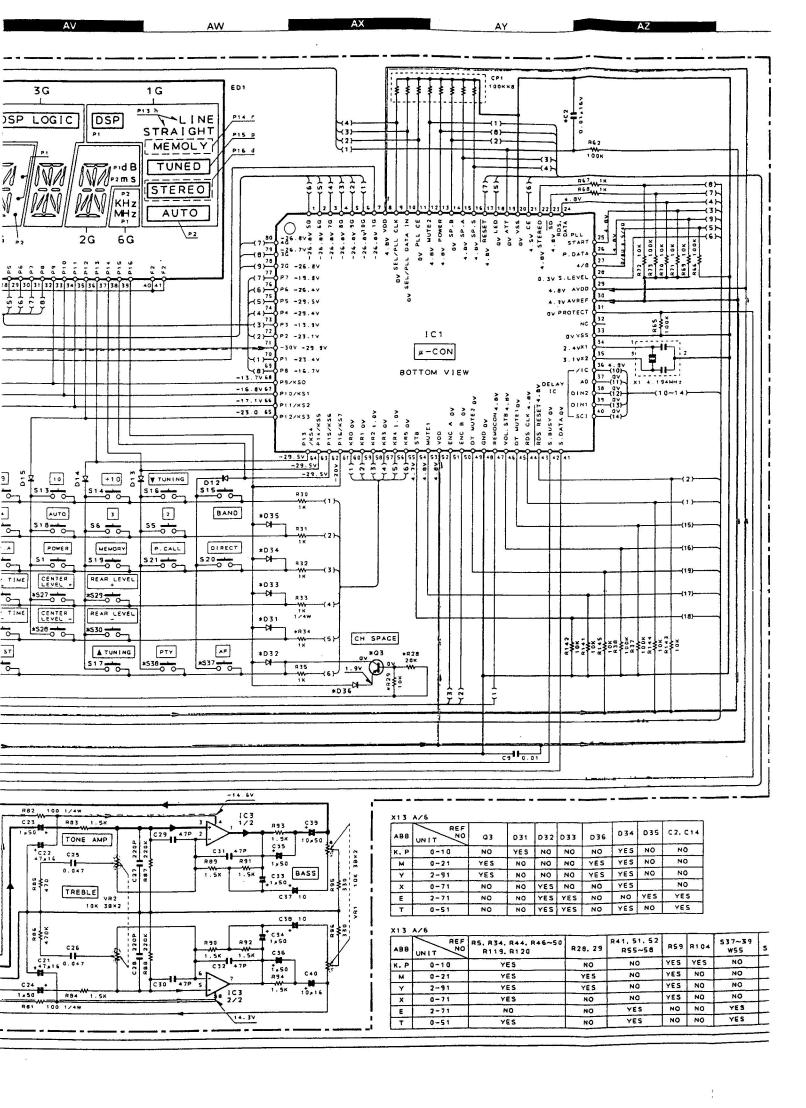


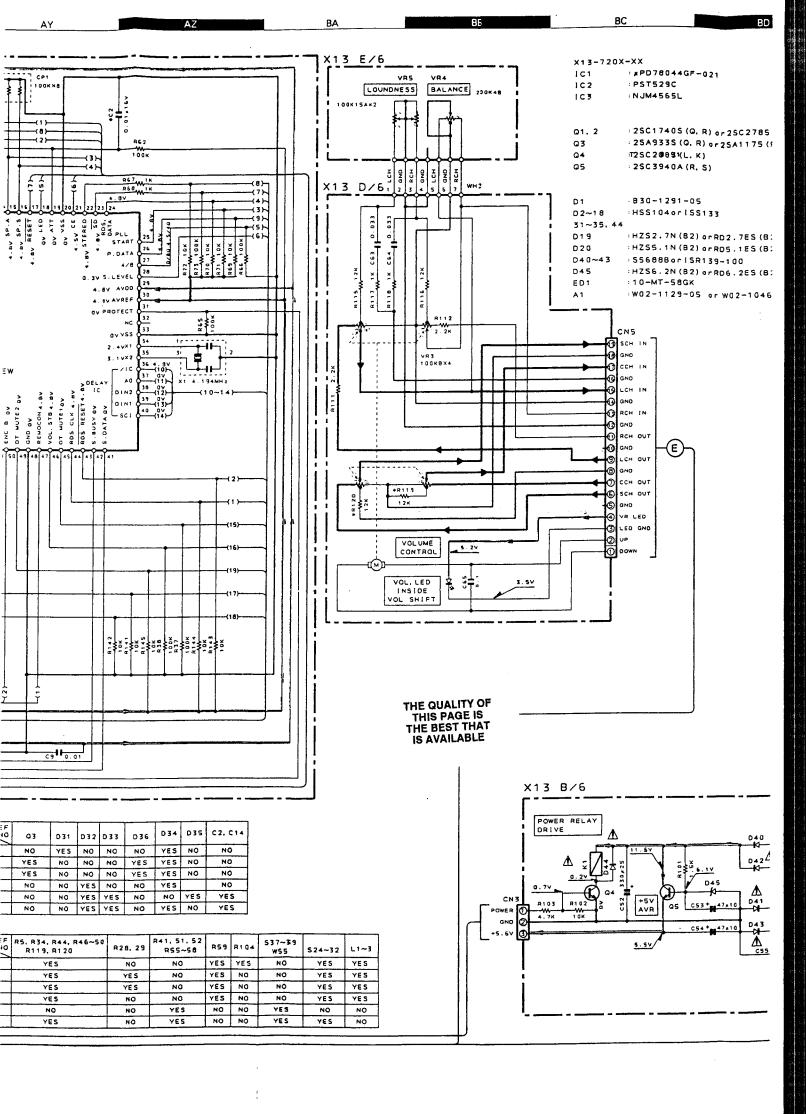
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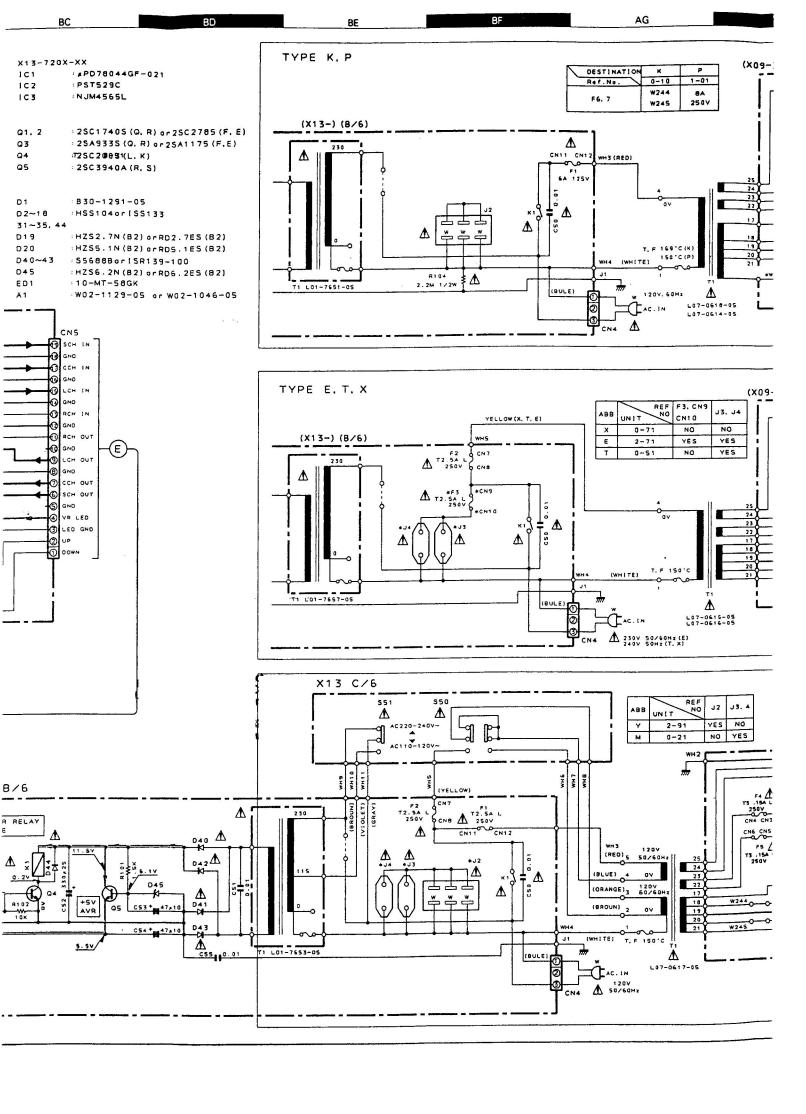
KR-V6050 KENWOOD

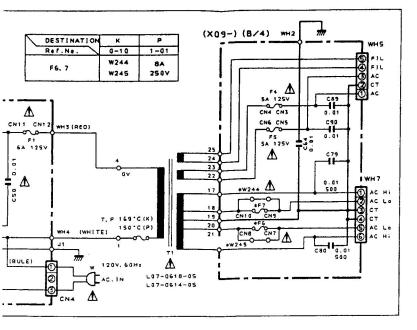


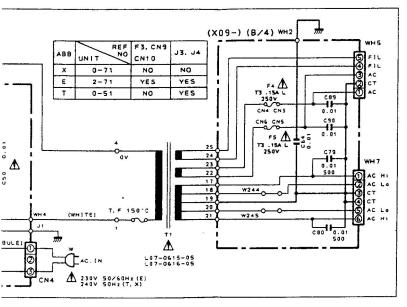


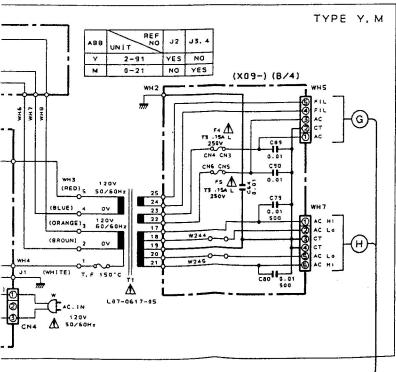












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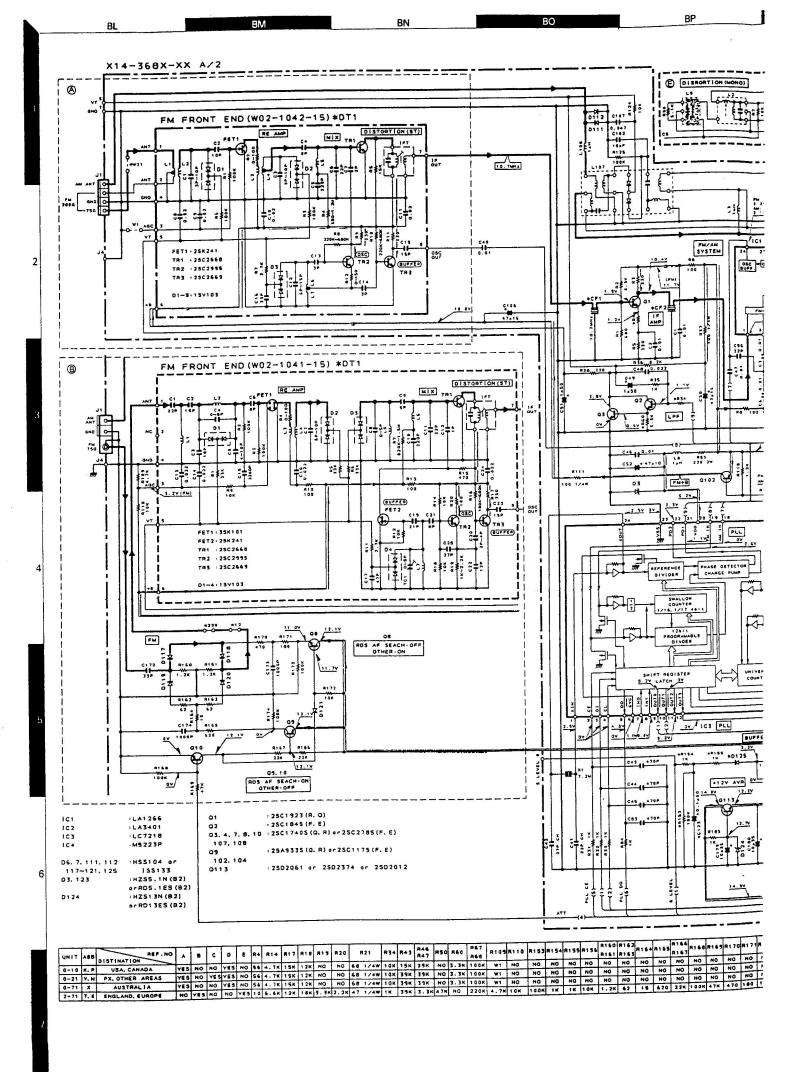
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). A Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit before the appliance is returned to the custom-

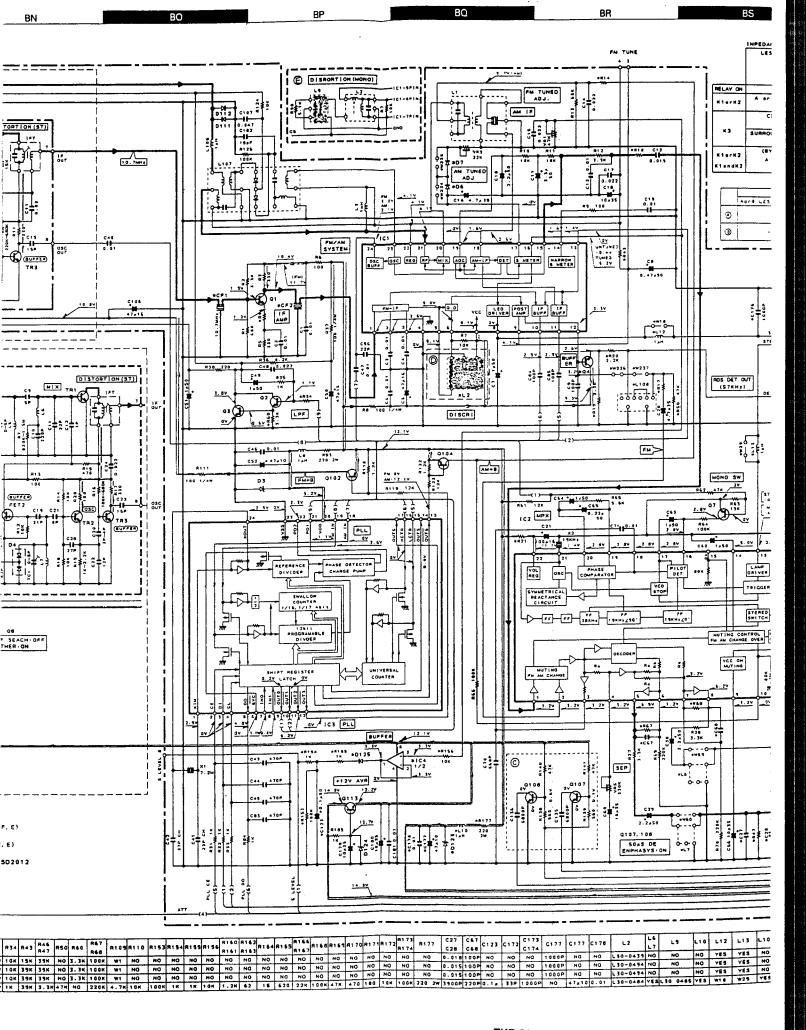
> THE QUALITY OF THIS PAGE IS THE BEST THAT IS AVAILABLE

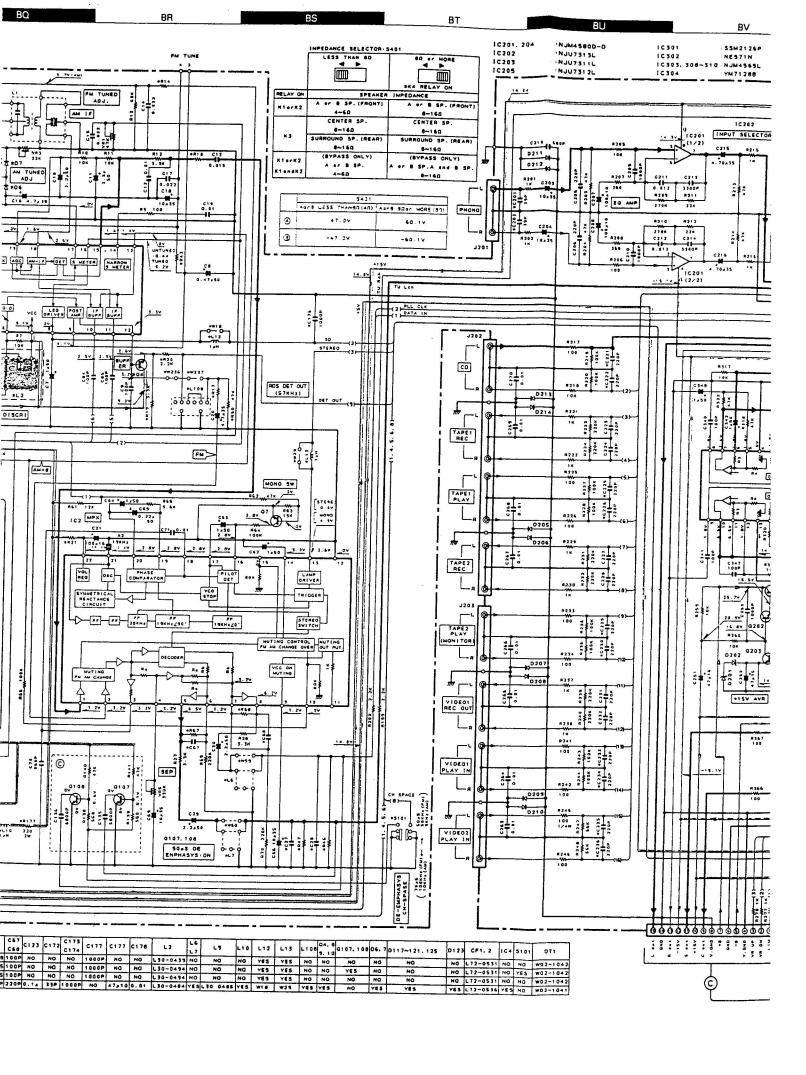
SIGNAL LINE GND LINE +B LINE -B LINE

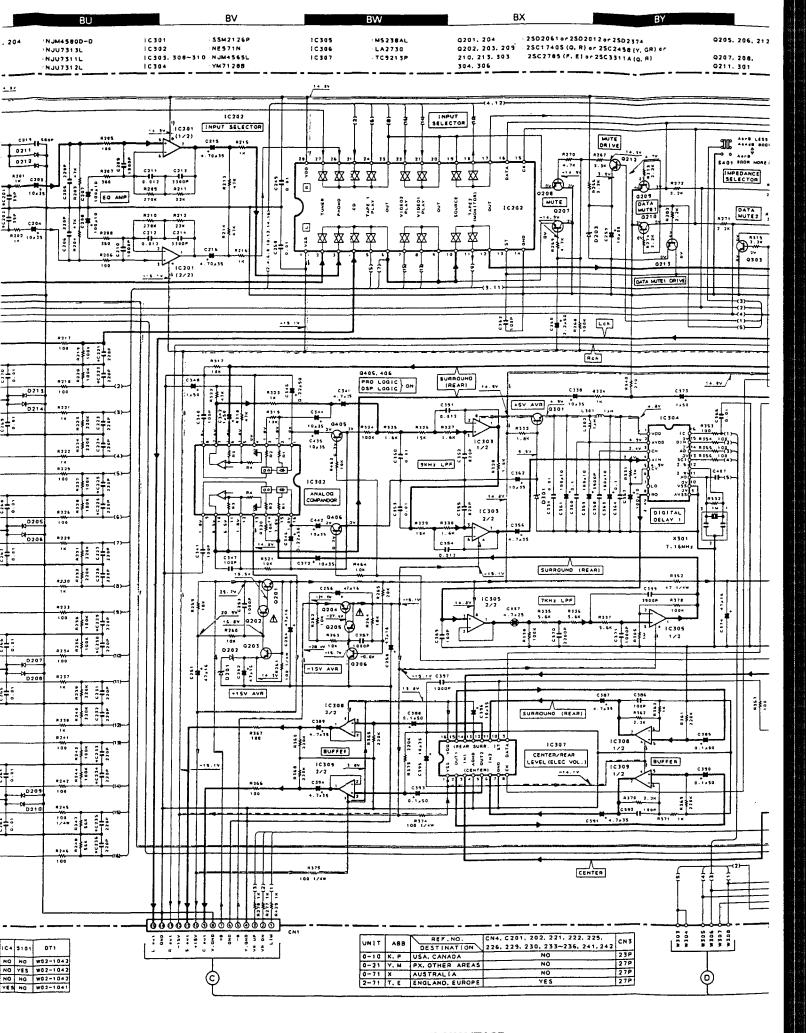
3/3

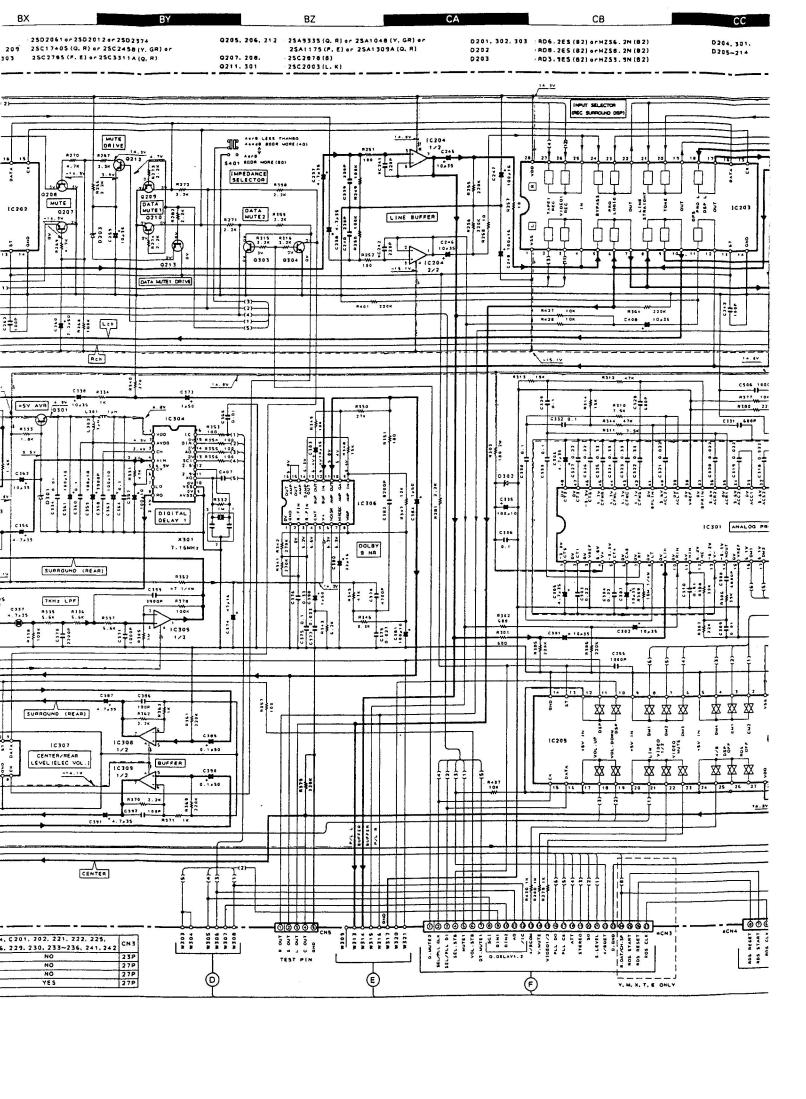
KR-V6050 **KENWOOD** 

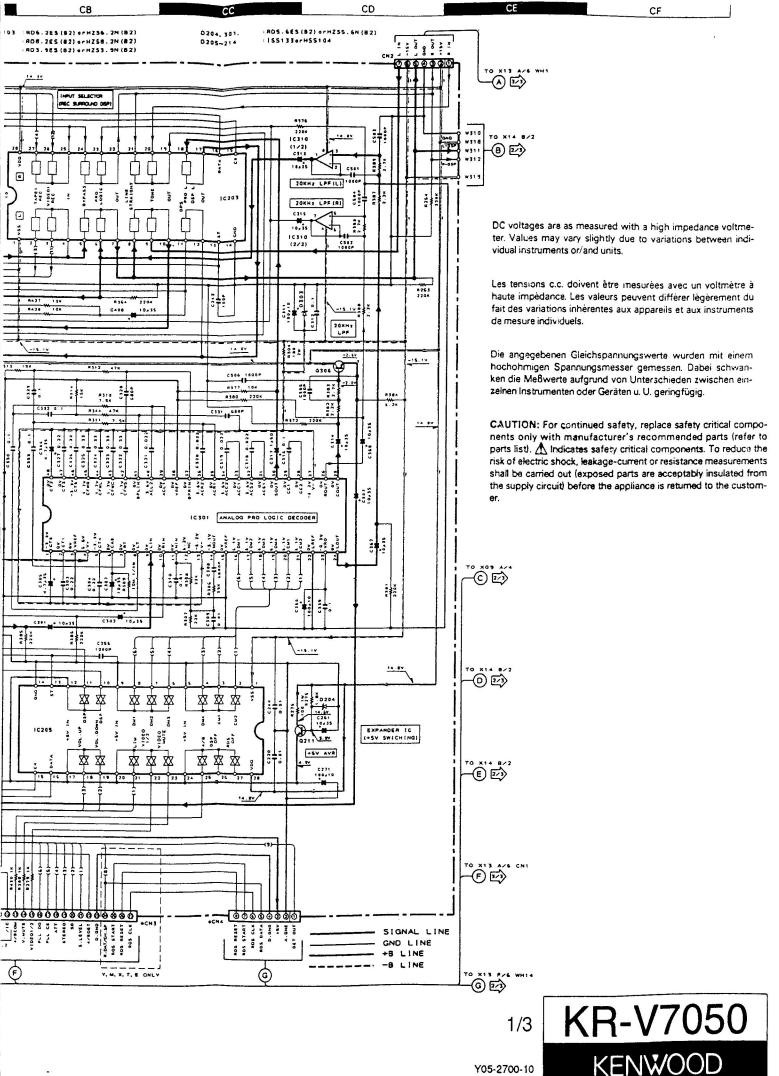


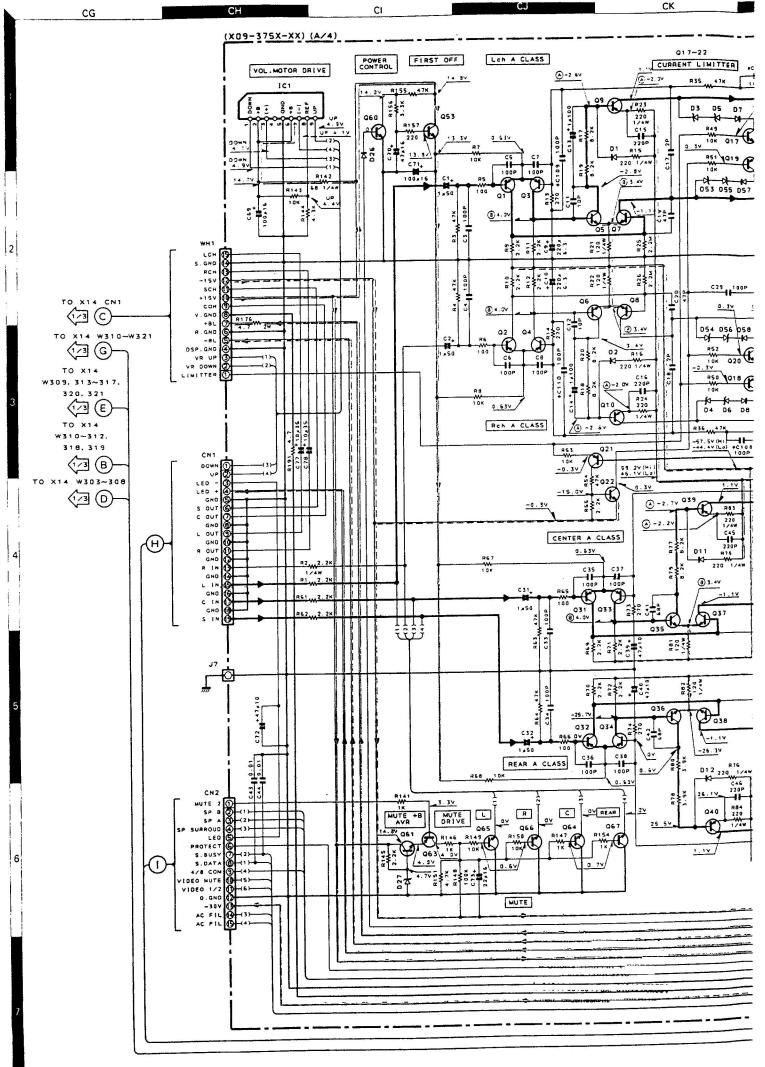


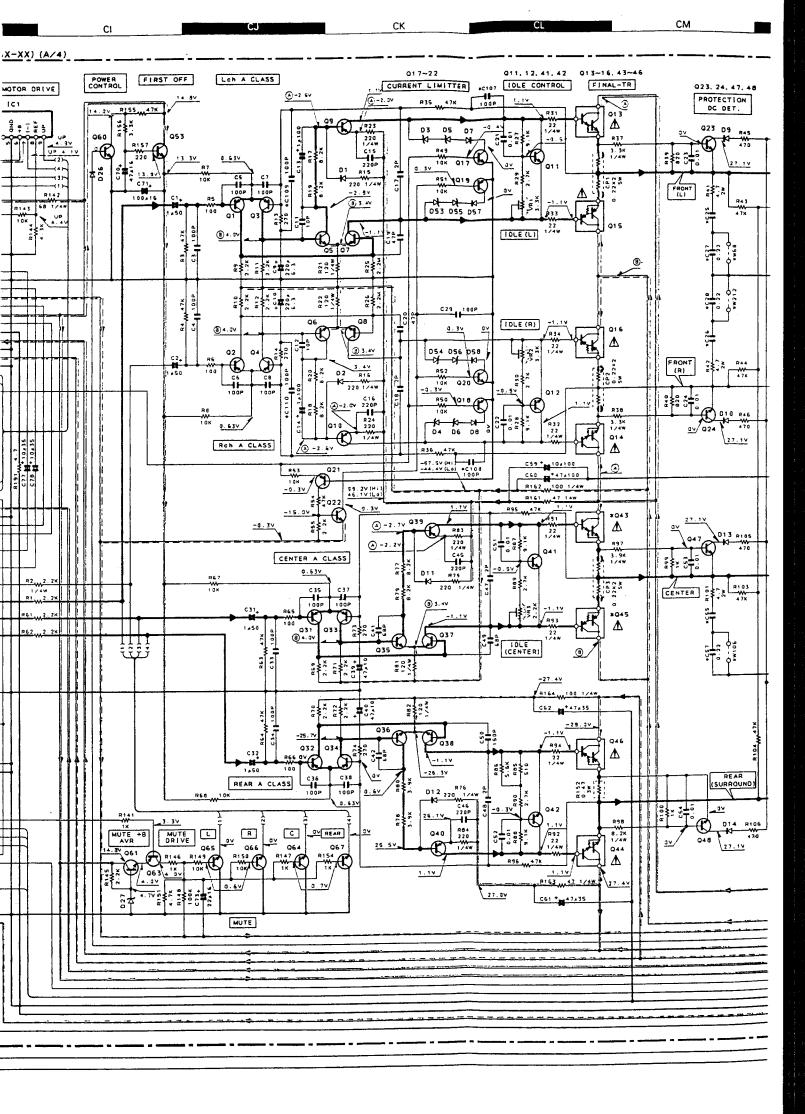


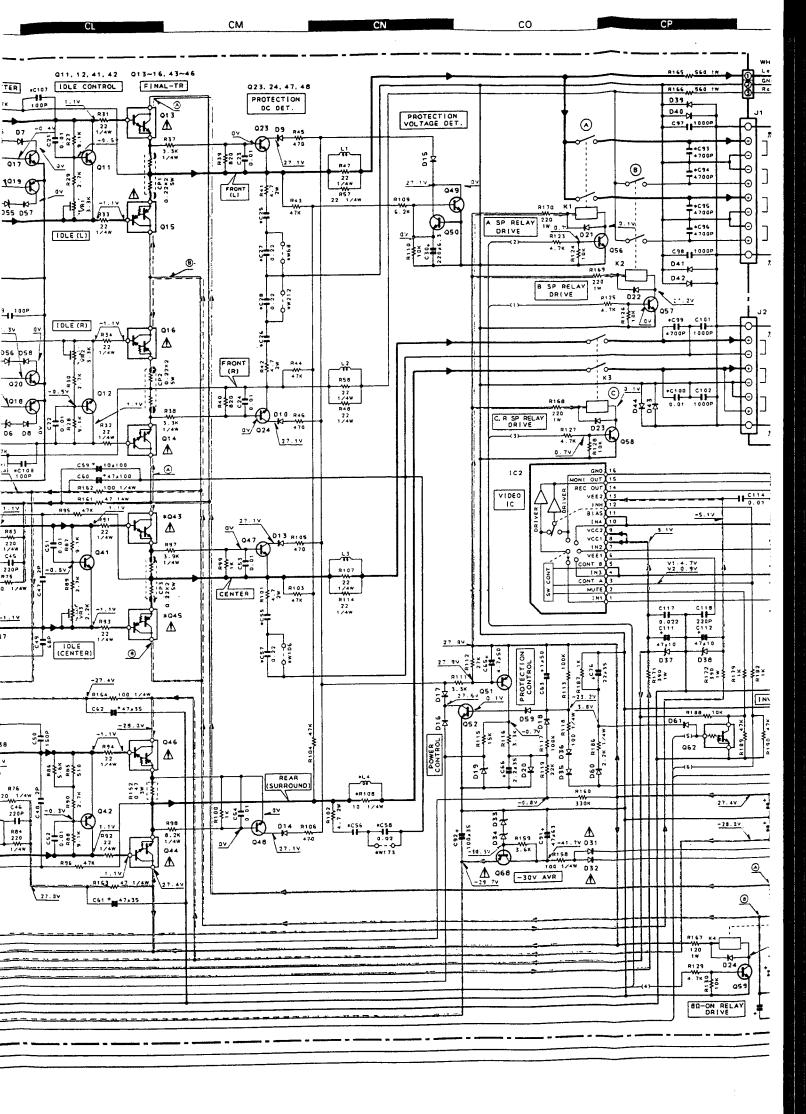


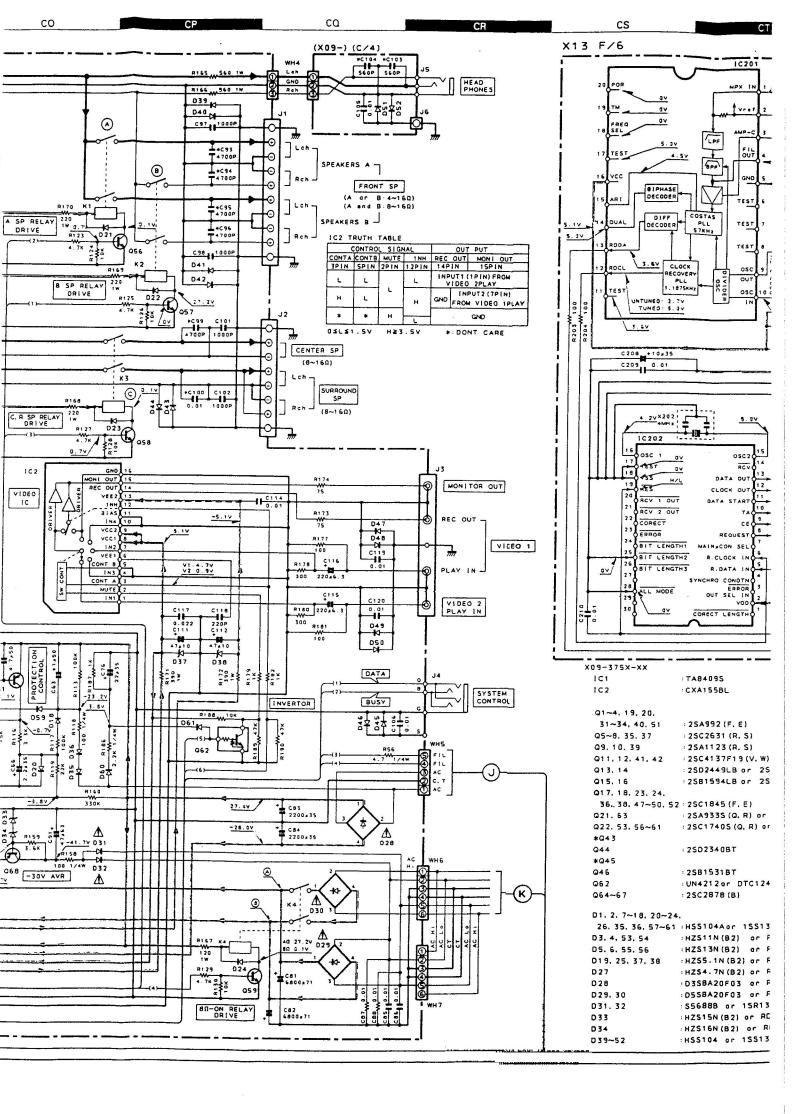


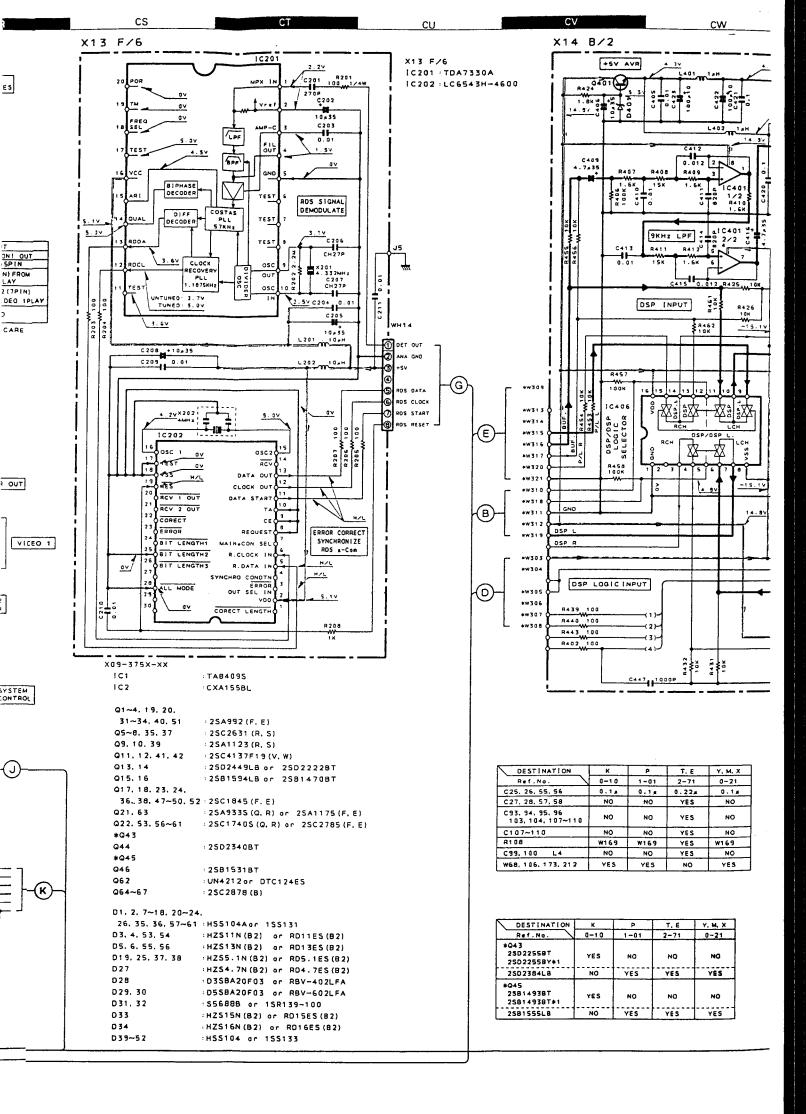


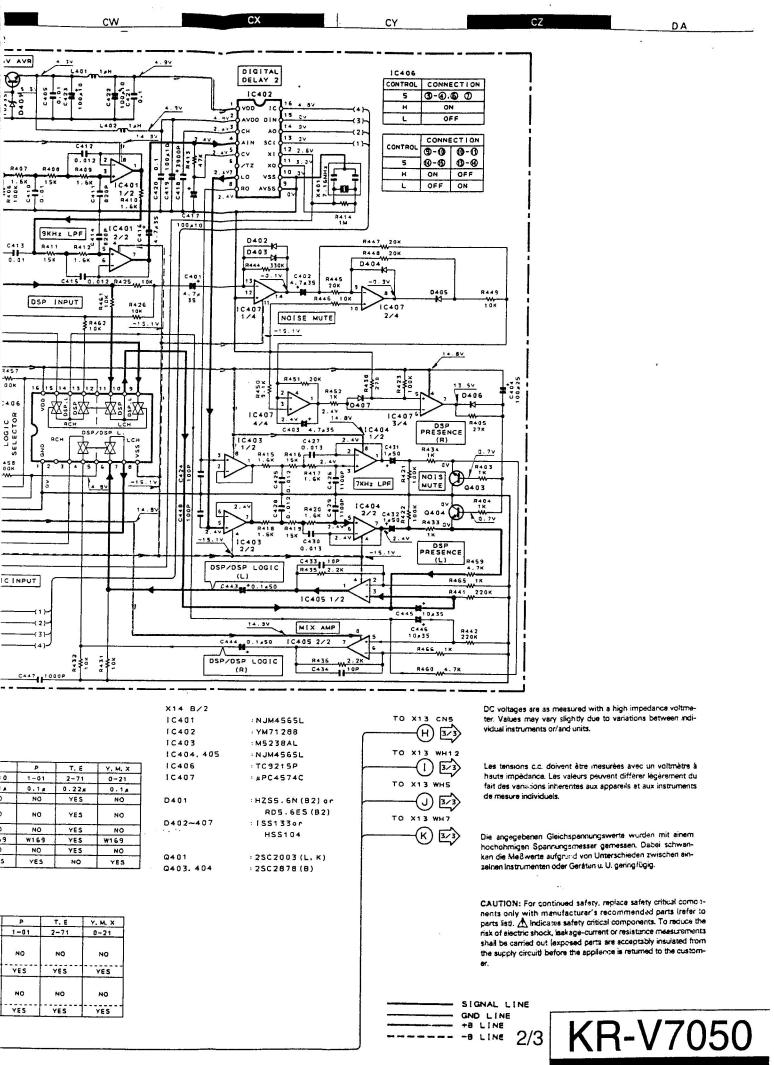


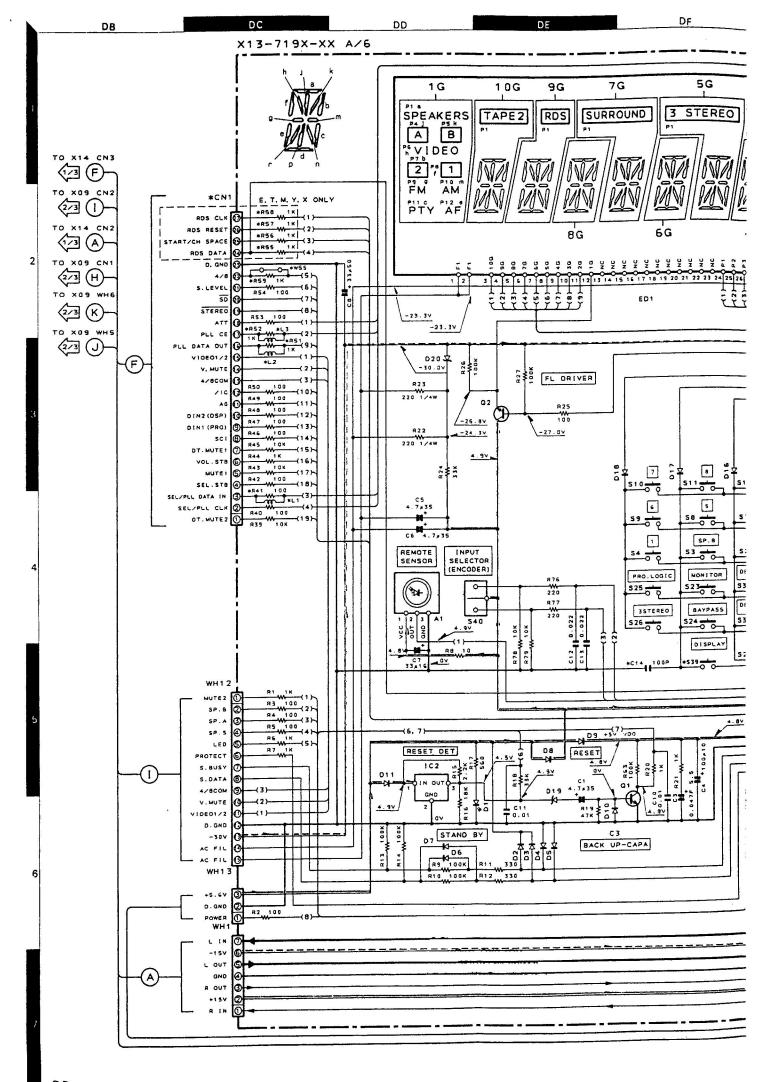


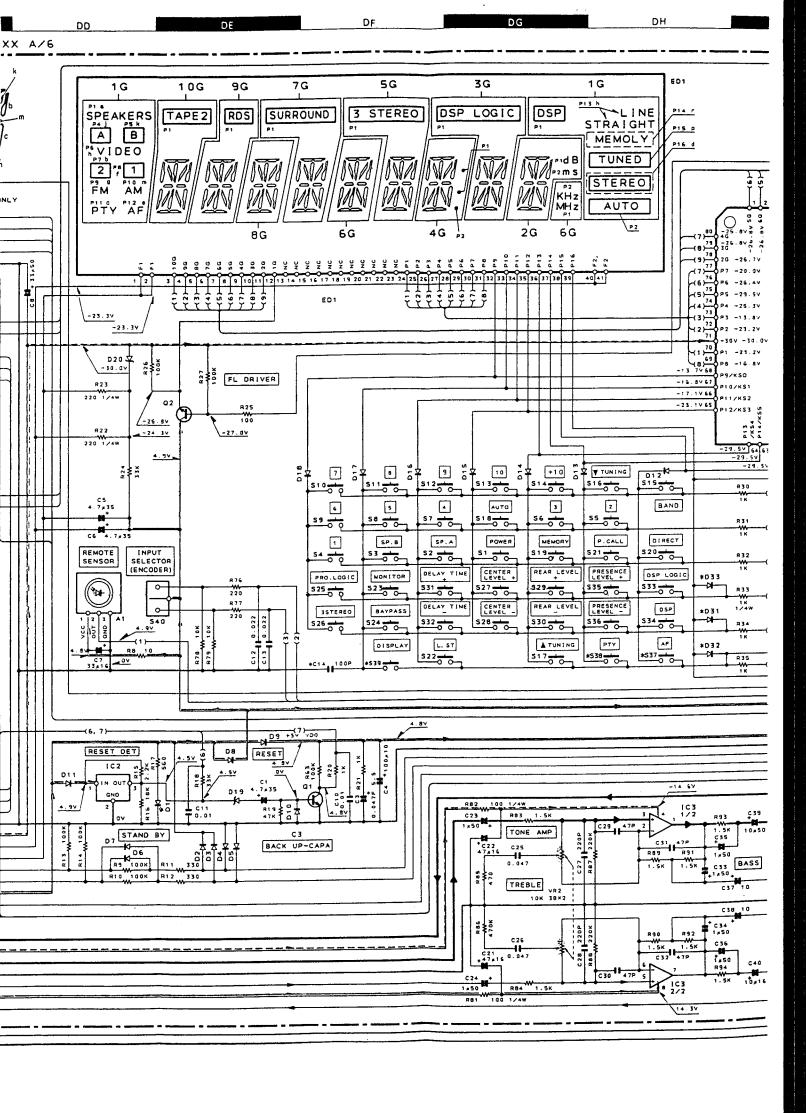


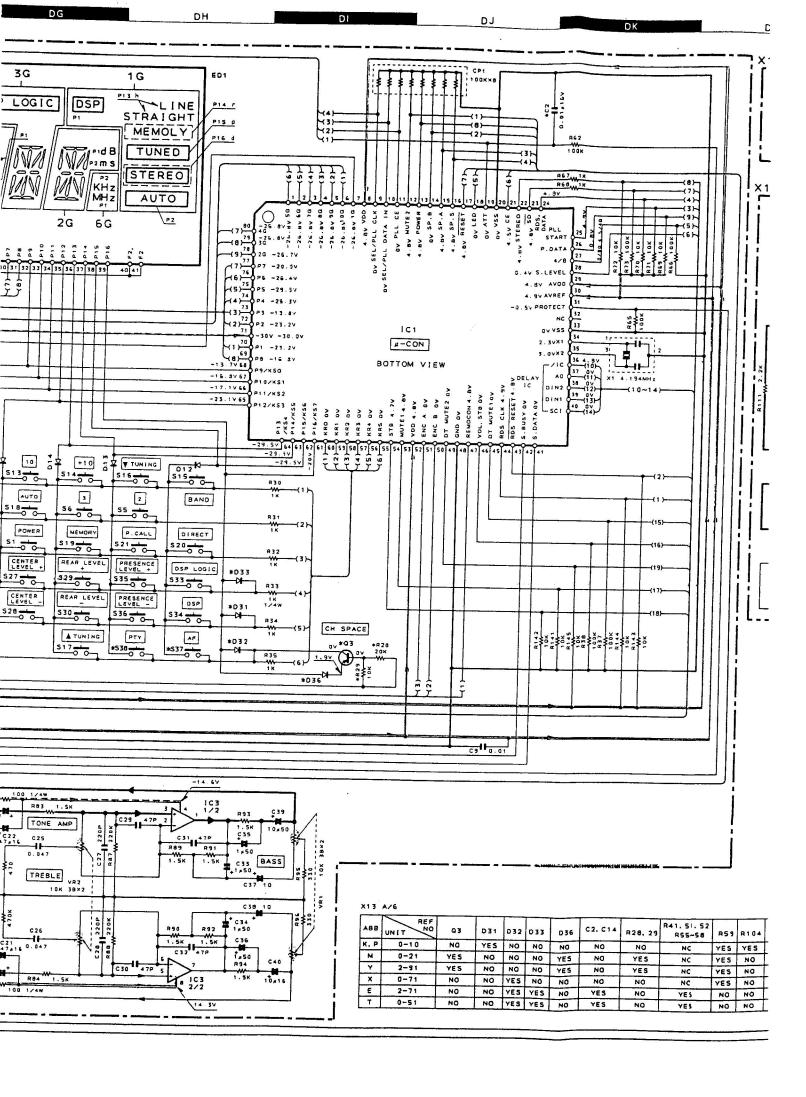


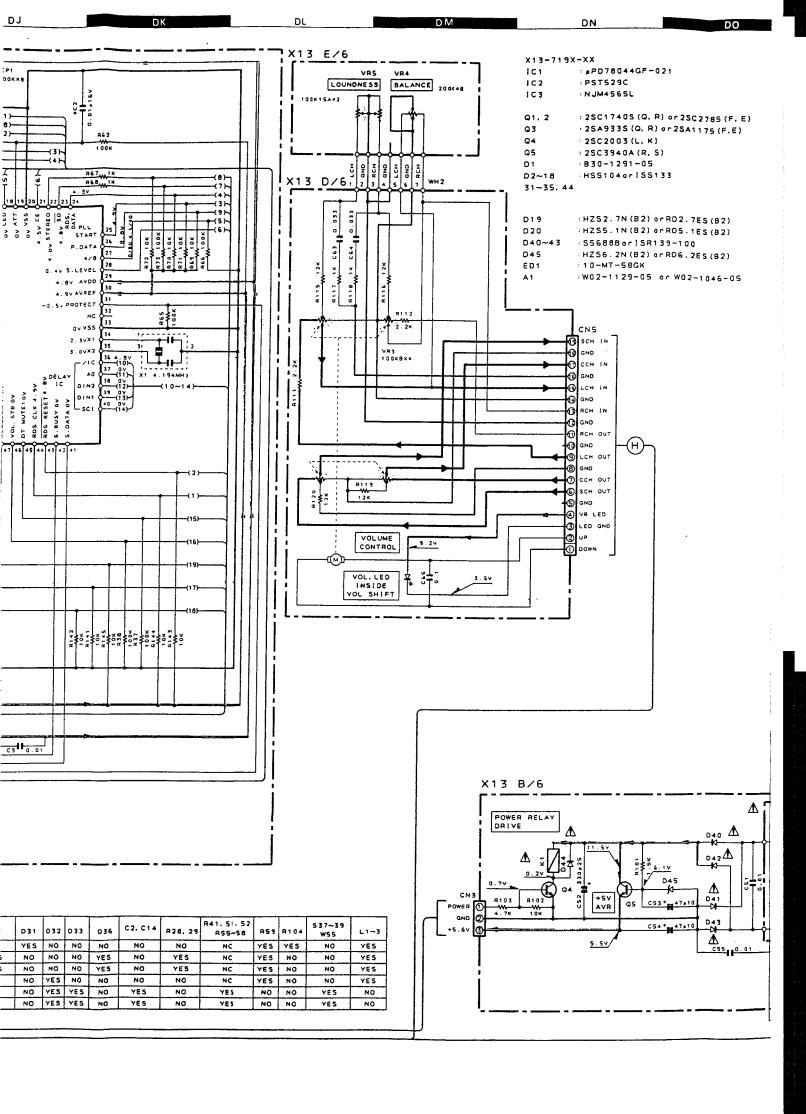


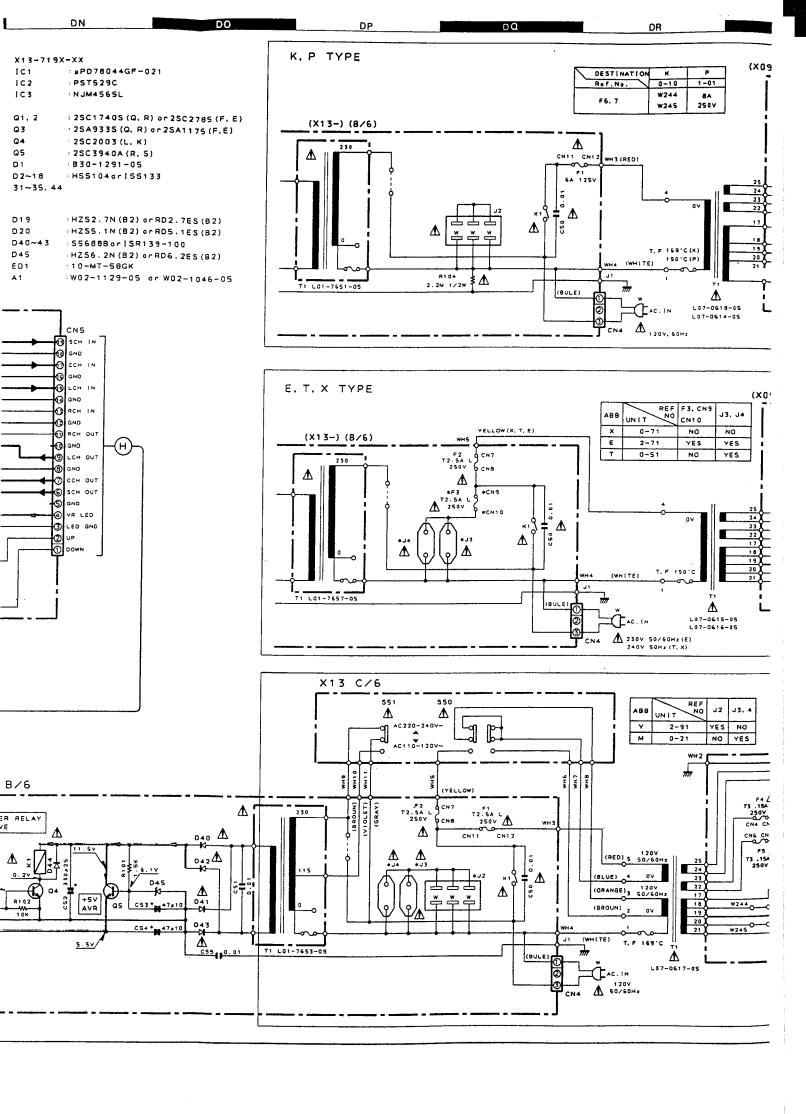


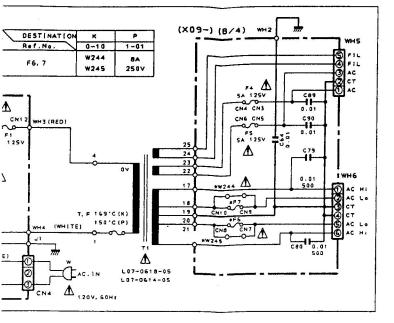


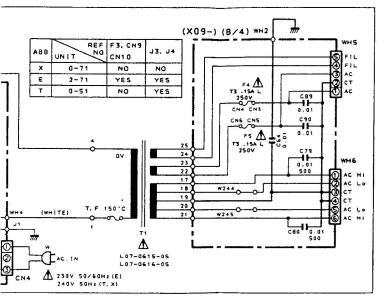


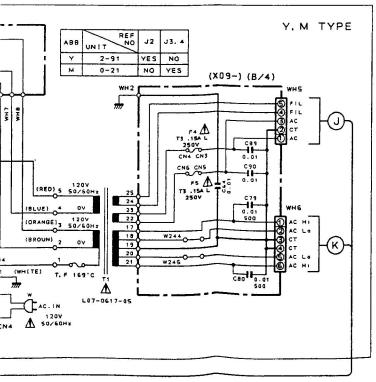












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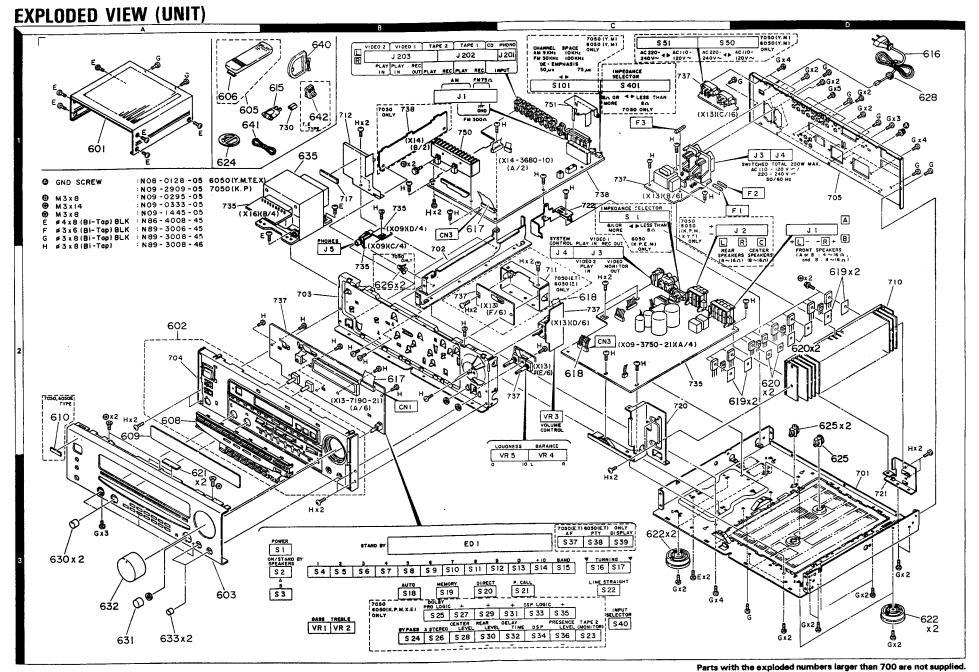
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+B LINE -B LINE SIGNAL LINE GND LINE 3/3

KR-V7050 KENWOOD



## **PARTS LIST**

#### **UNIT LIST**

	Singapore made	Malaysia made
Audio unit	X09-3750-11 (K) X09-3751-02 (P) X09-3750-22 (Y, M, X, T) X09-3752-72 (E) X09-3750-11 (KWW) X09-3751-02 (PWW)	X09-3750-11 (K) X09-3751-02 (P)
Accessory unit	X13-7200-10 (K, P) X13-7202-91 (Y) X13-7200-21 (M) X13-7200-71 (X) X13-7202-71 (E) X13-7200-10 (T) X13-7200-11 (KWW) X13-7200-10 (PWW)	X13-7200-10 (K, P)
Receiver unit	X14-3680-11 (K, P) X14-3680-22 (Y, M) X14-3680-72 (X) X14-3682-72 (E) X14-3680-51 (T) X14-3680-11 (KWW, PWW)	X14-3680-11 (K, P)

#### \* New Parts

## **PARTS LIST**

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Telle ohne Parts No. werden nicht geliefert.

Ref. No.	Address	New Parts	Parts No.	Description	Desti- Re- nation mark
参照番号	位 置	新	部品番号	部品名/規格	仕 向備者
			KR-V6050 (SI	NGAPORE MADE)	
601 602 602 602 603	1 A 2 A 2 A 2 A 3 A	* * * *	A01-2998-11 A22-1623-02 A22-1624-02 A22-1635-02 A60-0314-02	METALLIC CABINET SUB PANEL ASSY SUB PANEL ASSY SUB PANEL ASSY PANEL	KPYMX E T KPYMXT
603 605 605 606	3A 1A 1A 1A	* *	A60-0315-02 A70-0925-05 A70-0926-05 A09-0106-08	PANEL REMOTE CONTROLLER ASSY REMOTE CONTROLLER ASSY BATTERY COVER	E KPYMXT E
608 608 609 609 610	2A 2A 2A 2A 2A 2A	* * *	B07-2243-02 B07-2244-02 B10-1945-23 B10-1947-23 B43-0287-04	ESCUTCHEON ESCUTCHEON FRONT GLASS FRONT GLASS KENWOOD BADGE	KPYMXT E KPYMX TE E
- - - -			B46-0092-23 B46-0094-03 B46-0095-03 B46-0096-33 B46-0121-23	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	K Y Y X P
- - - -		*	B46-0122-23 B46-0143-13 B46-0197-00 B58-0513-04 B60-1009-00	WARRANTY CARD WARRANTY CARD QUESTIONAIRE CARD CAUTION CARD (PRESET220-240) INSTRUCTION MANUAL (ENGLISH)	E T K Y KPYMX
-		* * * *	860-1010-00 860-1011-00 860-1012-00 860-1183-00 860-1196-00	INSTRUCTION MANUAL (FRENCH) INSTRUCTION MANUAL (SPA,CHI) INSTRUCTION MANUAL (GE,DU,IT) INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (ENGLISH)	PE M E E T
615 616 616 616 616	18 10 10 10		E03-0115-05 E30-2592-15 E30-2605-05 E30-2650-05 E30-2717-05	AC PLUG ADAPTER AC POWER CORD	M ME Y KP X
616 617 617 618	10 1B,2B 1B,2B 2C	*	E30-2721-05 E31-7966-05 E35-0019-05 E35-0416-15	AC POWER CORD FLAT CABLE X13(CN1)-X14(CN3) FLAT CABLE X13(CN1)-X14(CN3) FLAT CABLE X09(CN1)-X13(CN5)	T KPX YMTE
619 620	2D 2D		F20-1284-05 F20-1297-05	INSULATING BOARD INSULATING SHEET	KPYMXT
621	3A		G11-1098-04	SOFT TAPE	
- -		* * * *	H50-0476-04 H50-0477-04 H50-0661-04 H10-5387-02 H10-5388-02	ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE POLYSTYRENE FOAMED FIXTURE	KPYXE M T KPYMXE KPYMXE
- - - -		* * *	H10-5472-02 H10-5473-02 H13-0118-04 H25-0225-04 H25-0232-04	POLYSTYRENE FOAMED FIXTURE POLYSTYRENE FOAMED FIXTURE CARTON BOARD PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03)	T T X KPYMXE KPYMXE

L:Scandinavia
Y:PX(Far East, Hawaii)
Y:AAFES(Europe)

K:USA P:CanadaT:England E:EuropeX:Australia M:Other Areas

## **PARTS LIST**

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	Ref. N	o.	Address	New	Parts	No.	Description		Re- marks
	参照番	号	位 置	1	部品	番号	部 品 名 / 規 格	仕 向	備考
					H25-0651 H25-0654		PROTECTION BAG (0232 PRINTED) PROTECTION BAG (0225 PRINTED)	T T	
1.	622 622 624 625 628		3C,3D 3C,3D 1A 2D,3D		J02-1013 J02-1034 J19-2815 J19-3180 J42-0083	-05 -04 -05	FOOT FOOT ANTENNA HOLDER UNIT HOLDER POWER CORD BUSHING	KPYMX TE	
	-				J61-0307	-05	WIRE BAND		
	630 631 632 633		3A 3A 3A 3A	* * *	K29-5611 K29-5612 K29-5613 K29-5672	-04 -04	KNOB BASS,TREBLE KNOB INPUT SELECTOR KNOB VOLUME KNOB LOUDNESS,BALANCE		
संस्थान	635 635 635 635 635		18 18 18 18 18	* * * * *	L07-0614 L07-0615 L07-0616 L07-0617	-05 -05 05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	P E XT YM K	
	A A C D E		1D 1D 2D 2A,3A 1A,3C		N08-0128 N09-2909 N09-0333 N09-1445 N86-4006	7-05 3-05 5-05	BINDING POST (EARTH) TAPTITE SCREW (EARTH) TAPPING SCREW (3X12) SET SCREW (M3X8) BINDING HEAD TAPTITE SCREW	YMXTE KP	
	G H		1A,1D 1B,2B		N89-3008		BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW		
	640 641 642		1B 1A 1B		T90-0174 T90-0175 T90-0185	-05	LOOP ANTENNA T TYPE ANTENNA ANTENNA ADAPTOR	TE	
			I <del></del>	I	KR-V605	0 (MAL	AYSIA MADE)	·	
	601 602 603 605 606		1 A 2 A 3 A 1 A 1 A	* * * *	A01-2998 A22-1623 A60-0314 A70-0925 A09-0108	3-02 1-02 5-05	METALLIC CABINET SUB PANEL ASSY PANEL REMOTE CONTROLLER ASSY BATTERY COVER		
	608 609 - - -		2A 2A	*	807-2243 810-1945 846-0092 846-0121 846-0193	5-23 2-23 1-23	ESCUTCHEON FRONT GLASS WARRANTY CARD WARRANTY CARD QUESTIONAIRE CARD	К Р К	
	- -			*	B60-1009 B60-1010		INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH)	P	
1	616 617 618		10 18,28 2C	*	E30-2650 E31-7960 E35-0410	5-05	AC POWER CORD FLAT CABLE X13(CN1)-X14(CN3) FLAT CABLE X09(CN1)-X13(CN5)		
	619 620		20 20		F20-1284 F20-129		INSULATING BOARD INSULATING SHEET		
	621		3A		G11-109	8-04	SOFT TAPE		
	- - -			* *	H50-066 H10-551 H10-551 H25-022 H25-023	2-02 3-02 5-04	ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE L POLYSTYRENE FOAMED FIXTURE R PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03)		

L:Scandinavia

K:USA

P:Canada

Y: AAFES (Europe)

E:Europe M:Other Areas

Y:PX(Far East, Hawaii) T:England X:Australia

× New Parts

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	Ref. No.	Address			arts	No		Description		Re- marks
	参照番号	位 置	Parts 新		00	番	号	部品名/規格		備考
١.	622 624 625 628	3C,3D 1A 2D,3D 1D		J02-1 J19-2 J19-3 J42-0 J61-0	815 180 083	-04 -05 -05		FOOT ANTENNA HOLDER UNIT HOLDER POWER CORD BUSHING WIRE BAND		
	630 631 632 633	AE AE AE AE	* * * *	K29-5 K29-5 K29-5 K29-5	612 613	-04 -04		KNOB BASS, TREBLE KNOB INPUT SELECTOR KNOB VOLUME KNOB LOUDNESS, BALANCE		1
+1 <1	635 635	1B 1B	*	L07-0				POWER TRANSFORMER POWER TRANSFORMER	P K	
	A C D E G	1D 2D 2A,3A 1A,3C 1A,1D		N09-2 N09-0 N09-1 N86-4 N89-3	333 445 008	-05 -05 -45		TAPTITE SCREW (EARTH) TAPPING SCREW (3X12) SET SCREW (M3X8) BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW		
	н	18,28		N89-3	008	-46		BINDING HEAD TAPTITE SCREW		
	640 641	1B 1A		T90-0	175	-05		LOOP ANTENNA T TYPE ANTENNA		
			_				SING	APORE MADE)	I	
	601 602 603	1 A 2 A 2 A 3 A	* * *	A01-2 A22-1 A22-1 A60-0	621 622 312	-02 -02 -02		METALLIC CABINET SUB PANEL ASSY SUB PANEL ASSY PANEL REMOTE CONTROL ASSY UNIT	KPYMX TE KPYMX	
	605 605 606	1 A 1 A 1 A	*	X94-1 X94-1 A09-0	011	-11		REMOTE CONTROL ASSY UNIT BATTERY COVER	TE	
	608 609 609	2A 2A 2A 2A	* * *	B07-2 B10-1 B10-1 B43-0 B46-0	945 947 287	-23 -23 -04		ESCUTCHEON FRONT GLASS FRONT GLASS KENWOOD BADGE WARRANTY CARD	KPYMX TE	
				B46-0 B46-0 B46-0 B46-0 B46-0	095 096 121	-03 -33 -23		WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	Y Y X P E	
			*	846-0 846-0 858-0 860-1 860-1	197 513 002	-00 -04 -00		WARRANTY CARD QUESTIONAIRE CARD CAUTION CARD (PRESET220-240) INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH)	T K Y KPYMX PE	
	111		* * *	860-1 860-1 860-1 860-1	005 006	-00 -00		INSTRUCTION MANUAL (CHINESE) INSTRUCTION MANUAL (GE,DU,IT) INSTRUCTION MANUAL (SPANISH) INSTRUCTION MANUAL (ENGLISH)	M E ME TE	
12/2/2/2/	615 616 616 616 616	1 B 1 D 1 D 1 D 1 D		E03-0 E30-2 E30-2 E30-2 E30-2	592 605 650	-15 -05 -05		AC PLUG ADAPTER AC POWER CORD AC POWER CORD AC POWER CORD AC POWER CORD	M ME Y KP X	
- 1	616	1 D		E30-2	721	-05		AC POWER CORD	Т	

**L**:Scandinavia

K:USA

P:Canada

Y:PX(Far East, Hawaii)

T:England

E:Europe

Y:AAFES(Europe)

M:Other Areas X:Australia

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Telle ohne Parts No. werden nicht geliefert.

Ref. No.	Address		Parts No.	Description	Desti- Re- nation marks
参照番号	位 置	Parts 新	部品番号	部品名/規格	仕 向 備考
617 617 618	18,28 18,28 2C	*	E31-7966-05 E35-0019-05 E35-0416-15	FLAY CABLE X13(CN1)-X14(CN3) FLAT CABLE X13(CN1)-X14(CN3) FLAT CABLE X09(CN1)-X13(CN5)	KPX YMTE
619 620	2D 2D		F20-1284-05 F20-1297-05	INSULATING BOARD INSULATING SHEET	
621	ЗА		G11-1098-04	SOFT TAPE	
-		* * * * *	H50-0474-04 H50-0475-04 H50-0490-04 H10-5387-02 H10-5388-02	ITEM CARTON CASE ITEM CARTON CASE ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE POLYSTYRENE FOAMED FIXTURE	KPYXE M T KPYMXE KPYMXE
		* *	H10-5472-02 H10-5473-02 H13-0118-04 H25-0225-04 H25-0232-04	POLYSTYRENE FOAMED FIXTURE POLYSTYRENE FOAMED FIXTURE CARTON BOARD PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03)	T T X KPYMXE KPYMXE
-			H25-0651-04 H25-0654-04	PROTECTION BAG (0232 PRINTED) PROTECTION BAG (0225 PRINTED)	T
622 622 622 624 625	3C,3D 3C,3D 3C,3D 1A 2D,3D		J02-1013-05 J02-1024-05 J02-1034-05 J19-2815-04 J19-3180-05	FOOT REAR FOOT FRONT FOOT ANTENNA HOLDER UNIT HOLDER	KP KP YMXTE
626 628 -	2B 1D		J19-3323-05 J42-0083-05 J61-0307-05	UNIT HOLDER POWER CORD BUSHING WIRE BAND	
630 631 632 633	3A 3A 3A 3A	* * * *	K29-5611-04 K29-5612-04 K29-5613-04 K29-5672-04	KNOB BASS,TREBLE KNOB INPUT SELECTOR KNOB VOLUME KNOB LOUDNESS,BALANCE	
635 635 635 635 635	18 18 18 18 18	* * * * *	L07-0614-05 L07-0615-05 L07-0616-05 L07-0617-05 L07-0618-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	P E XT YM K
A A C D E	1D 1D 2D 2A,3A 1A,3C		N08-0128-35 N09-2909-05 N09-0333-05 N09-1445-05 N86-4008-45	BINDING POST (EARTH) TAPTITE SCREW (EARTH) TAPPING SCREW (3X12) SET SCREW (M3X8) BINDING HEAD TAPTITE SCREW	YMXTE KP
G H	1A,1D 1B,2B		N89-3008-45 N89-3008-46	BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW	
640 641 642	1B 1A 1B		T90-0174-05 T90-0175-05 T90-0185-05	LOOP ANTENNA T TYPE ANTENNA ANTENNA ADAPTOR	TE
	T	т.	KR-V7050 (MAL	TOTAL TOTAL CONTROL OF THE CONTROL O	T
601 602 603 605 606	1 A 2 A 3 A 1 A 1 A	* * *	A01-2998-11 A22-1621-02 A60-0312-02 X94-1010-91 A09-0126-03	METALLIC CABINET SUB PANEL ASSY PANEL REMOTE CONTROL ASSY UNIT BATTERY COVER	

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#### **PARTS LIST**

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Teile ohne Parts No. werden nicht gellefert.

	Ref. No.	Address	New Parts	Parts No.	Description	Desti- nation	Re- marks
	参照番号	位 置	新	部品番号	部 品 名 / 規 格	仕 向	備考
	608 609 610	2A 2A 2A	*	B07-2230-02 B10-1945-23 B43-0287-04 B46-0092-23 B46-0121-23	ESCUTCHEON FRONT GLASS KENWOOD BADGE WARRANTY CARD WARRANTY CARD	K	
	- - -		*	B46-0197-00 B60-1002-00 B60-1003-00	QUESTIONAIRE CARD INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH)	K P	
1	616 617 618	1D 1B,2B 2C	*	E30-2650-05 E31-7966-05 E35-0416-15	AC POWER CORD FLAT CABLE X13(CN1)-X14(CN3) FLAT CABLE X09(CN1)-X13(CN5)		
	619 620	2D 2D		F20-1284-05 F20-1297-05	INSULATING BOARD INSULATING SHEET		
	621	3 <b>A</b>		G11-1098-04	SOFT TAPE		
	- - -		* * *	H50-0663-04 H10-5512-02 H10-5513-02 H25-0225-04 H25-0232-04	ITEM CARTON CASE POLYSTYRENE FOAMED FIXTURE L POLYSTYRENE FOAMED FIXTURE R PROTECTION BAG (850X450X0.03) PROTECTION BAG (235X350X0.03)		
	622 622 624 625 626	3C,3D 3C,3D 1A 2D,3D 2B		J02-1013-05 J02-1024-05 J19-2815-04 J19-3180-05 J19-3323-05	FOOT REAR FOOT FRONT ANTENNA HOLDER UNIT HOLDER UNIT HOLDER		
7	628	1 D		J42-0083-05 J61-0307-05	POWER CORD BUSHING WIRE BAND		
	630 631 632 633	3A 3A 3A 3A	* * * *	K29-5611-04 K29-5612-04 K29-5613-04 K29-5672-04	KNOB BASS,TREBLE KNOB INPUT SELECTOR KNOB VOLUME KNOB LOUDNESS,BALANCE		
7	635 635	1B 1B	*	L07-0614-05 L07-0618-05	POWER TRANSFORMER POWER TRANSFORMER	P K	
	A C D E G	1D 2D 2A,3A 1A,3C 1A,1D		N09-2909-05 N09-0333-05 N09-1445-05 N86-4008-45 N89-3008-45	TAPTITE SCREW (EARTH) TAPPING SCREW (3X12) SET SCREW (M3X8) BINDING HEAD TAPTITE SCREW BINDING HEAD TAPTITE SCREW		
	н	18,28		N89-3008-46	BINDING HEAD TAPTITE SCREW		
	640 641	1B 1A		T90-0174-05 T90-0175-05	LOOP ANTENNA T TYPE ANTENNA (X09-375X-XX)		
	01 0	ī——-	1	AUDIO UNIT	(XU9-3/3X-XX) ELECTRØ 1.0UF 50WV	1	Τ
	C1 ,2 C3 -8 C9 ,10 C11 ,12 C13 ,14			CE04LW1H010M CC45FSL1H101J CE04LW0J221M CC45FSL1H100D CE04LW2A010M	CERAMIC 100PF J ELECTRO 220UF 6.3WV CERAMIC 10PF D ELECTRO 1.0UF 100WV		
	C15 ,16 C17 ,18 C19 ,20 C21 -24 C25 -28			CC45FSL1H221J CC45FSL1H020C CC45FSL1H470J CK45FF1H103Z CF92FV1H224J	CERAMIC 220PF J CERAMIC 2.0PF C CERAMIC 47PF J CERAMIC 0.010UF Z MF 0.22UF J	E	6

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Ref. No.	Address New	1	Description	Desti-Re
参照番号	位 置 新	1	部品名/規格	nation ma 仕 向 備
C25 -28 C25 ,26 C25 ,26 C29 C30		CF92FV1H224J CQ92FM1H104J CQ92FM1H104J CC45FSL1H101J CE04LW0J221M	MF 0.22UF J MYLAR 0.10UF J MYLAR 0.10UF J CERAMIC 100PF J ELECTRO 220UF 6.3WV	TE KPYMX KPYMXT
C31 ,32 C31 ,32 C33 -38 C33 -38 C39 ,40		CE04LW1H010M CE04LW1H010M CC45FSL1H101J CC45FSL1H101J CE04LW1A470M	ELECTRO 1.OUF 50WV ELECTRO 1.OUF 50WV CERAMIC 100PF J CERAMIC 100PF J ELECTRO 47UF 10WV	KPYMXT KPYMXT
C39 ,40 C41 ,42 C41 ,42 C43 ,44 C45 ,46		CE04LW1A470M CC45FSL1H680J CC45FSL1H680J CK45FF1H103Z CC45FSL1H221J	ELECTRO 47UF 10WV CERAMIC 68PF J CERAMIC 68PF J CERAMIC 0.010UF Z CERAMIC 220PF J	KPYMXT
C45 ,46 C47 ,48 C47 ,48 C49 C49		CC45FSL1H221J CC45FSL1H020C CC45FSL1H020C CC45FSL1H680J CC45FSL1H680J	CERAMIC 220PF J CERAMIC 2.0PF C CERAMIC 2.0PF C CERAMIC 68PF J CERAMIC 68PF J	KPYMXT KPYMXT KPYMXT
C50 C50 C51 -54 C51 -54 C55 -58		CC45FSL1H151J CC45FSL1H151J CK45FF1H103Z CK45FF1H103Z CF92FV1H224J	CERAMIC 150PF J CERAMIC 150PF J CERAMIC 0.010UF Z CERAMIC 0.010UF Z MF 0.22UF J	KPYMXT KPYMXT TE
C55 ,56 C59 C60 C61 ,62 C61 ,62		CQ92FM1H104J CE04LW2A100M CE04LW2A470M CE04LW1V470M CE04LW1V470M	MYLAR 0.10UF J ELECTRO 10UF 100WV ELECTRO 47UF 100WV ELECTRO 47UF 35WV ELECTRO 47UF 35WV	KPYMXT KPYMXT
C63 C64 C65 C66 C67 ,68		CE04LW1H010M CK45FF1H103Z CE04LW1H4R7M CE04LW1H2R2M CE04LW1A101M	ELECTRO	
C69 C70 C71 C72 C73		CE04LW1C101M CE04LW1C470M CE04LW1C101M CE04LW1A470M CE04LW1C220M	ELECTRO 100UF 16WV ELECTRO 47UF 16WV ELECTRO 100UF 16WV ELECTRO 47UF 10WV ELECTRO 22UF 16WV	
C74 C75 C76 C77 ,78 C79 ,80		CE04LW2A2R2M CE04LW1V4R7M CE04LW1V220M CE04LW1V100M CK45FE2H103P	BLECTRO   2.2UF   100WV   ELECTRO   4.7UF   35WV   ELECTRO   22UF   35WV   ELECTRO   10UF   35WV   CERAMIC   0.010UF   P	
C81 ,82 C83 ,84 C85 ,86 C87 -90 C89 ,90	*	C90-3490-05 CE04LW1V222M CK45FF1H103Z CK45FF1H103Z CK45FF1H103Z	ELECTRO 6800UF 71WV ELECTRO 2200UF 35WV CERAMIC 0.010UF Z CERAMIC 0.010UF Z CERAMIC 0.010UF Z	
C91 C92 C93 -96 C93 -96 C97 ,98		CE04LW1J470M CE04LW1V101M CK45FF1H472Z CK45FF1H472Z CK45FB1H102K	ELECTRO 47UF 63WV ELECTRO 100UF 35WV CERAMIC 4700PF Z CERAMIC 4700PF Z CERAMIC 1000PF K	E

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Ref. No.	Address		Parts No.	Description		Re- marks
参照番号	位 置	Parts #∏	部品番号	部品名/規格		備考
C99 C100 C101,102 C101,102 C103,104			CK45FF1H472Z CK45FF1H103Z CK45FB1H102K CK45FB1H102K CC45FSL1H561J	CERAMIC 4700PF Z CERAMIC 0.010UF Z CERAMIC 1000PF K CERAMIC 1000PF K CERAMIC 560PF J	TE TE KPYMXT E	7 7 7 6 6
C103,104 C105,106 C107-110 C107-110 C111,112			CC45FSL1H561J CK45FF1H103Z CC45FSL1H101J CC45FSL1H101J CE04LW1A470M	CERAMIC 560PF J CERAMIC 0.010UF Z CERAMIC 100PF J CERAMIC 100PF J ELECTRO 47UF 10WV	TE E TE	7 6 7
C114 C115,116 C117 C118 C119,120			CK45FF1H103Z CE04LW0J221M CK45FF1H223Z C91-0749-05 CK45FF1H103Z	CERAMIC   0.010UF   Z   ELECTRO   220UF   6.3WV   CERAMIC   0.022UF   Z   CERAMIC   220PF   K   CERAMIC   0.010UF   Z		6
CN1 J1 J1 J1 J1	2C		E40-4159-05 E70-0020-05 E70-0020-05 E70-0029-05 E70-0029-05	FLAT CABLE CONNCTOR LOCK TERMINAL BOARD SPEAKERS LOCK TERMINAL BOARD SPEAKERS SCREW TERMINAL BOARD SPEAKERS SCREW TERMINAL BOARD SPEAKERS	KPYMX KPYMXT E TE ·	7 6 6 7
J2 J2 J3 J4 J5		*	E70-0014-05 E70-0014-05 E63-0069-05 E11-0188-05 E11-0207-05	LOCK TERMINAL BOARD CEN,REA SP LOCK TERMINAL BOARD CEN,REA SP PHONO JACK MONI,VIDEO 1,2 MINIATURE PHONE JACK SYNCHRO PHONE JACK HEAD PHONES	KPYMXT KPYMXT	7 6 6
J5 J5			E11-0208-05 E11-0208-05	PHONE JACK HEAD PHONES PHONE JACK HEAD PHONES	Е	6 7
F4 ,5 F4 ,5 F6 ,7			F04-5022-05 F05-3121-05 F05-8029-05	FUSE (UL) (125V 5A UL) FUSE (SEMKO) (250V T3.15A) FUSE (UL) (250V 8A)	KP YMXTE P	
CN3 -6 CN7 -10 J8			J13-0075-05 J13-0041-05 J11-0098-05	FUSE CLIP FUSE CLIP WIRE CLAMPER	Р	6
L1 -3 L1 -3 L1 -4 L1 ,2			L39-0085-05 L39-0085-05 L39-0085-05 L39-0085-05	PHASE COMPENSATION COIL PHASE COMPENSATION COIL PHASE COMPENSATION COIL PHASE COMPENSATION COIL	KPYMX KPYMXT TE E	7 6 7 6
CP1 -3 CP1 -3 CP1 ,2 R15 ,16 R21 ,22			R90-0840-05 R90-0840-05 R90-0840-05 R90-0840-05 RD14NB2E221J RD14NB2E121J	COMPOSITE ELEMENTS COMPOSITE ELEMENTS COMPOSITE ELEMENTS RD 220 J 1/4W RD 120 J 1/4W	KPYMXT E	7 6 6
R23 ,24 R31 -34 R37 ,38 R41 ,42 R56			RD14NB2E221J RD14NB2E220J RD14NB2E332J RS14KB3D4R7J RD14NB2E4R7J	RD 220 J 1/4W RD 22 J 1/4W RD 3.3K J 1/4W FL-PROOF RS 4.7 J 2W RD 4.7 J 1/4W		
R75 ,76 R75 ,76 R81 ,82 R81 ,82 R83 ,84			RD14NB2E221J RD14NB2E221J RD14NB2E121J RD14NB2E121J RD14NB2E221J	RD 220 J 1/4W RD 220 J 1/4W RD 120 J 1/4W RD 120 J 1/4W RD 220 J 1/4W	KPYMXT KPYMXT	7
R83 ,84			RD14NB2E221J	RD 220 J 1/4W	KPYMXT	6

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 $\triangle$  indicates safety critical components.

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Ref. No.	Address New		Description	Desti-	Re-
参照番号	位 潭 新	部品番号	部品名/規格		marks 備考
R91 -94 R91 -94 R97 R97 R98		RD14NB2E220J RD14NB2E220J RD14NB2E392J RD14NB2E392J RD14NB2E822J	RD 22 J 1/4W RD 22 J 1/4W RD 3.9K J 1/4W RD 3.9K J 1/4W RD 8.2K J 1/4W	KPYMXT KPYMXT	7
R98 R101,102 R101,102 R118 R120		RD14NB2E822J RS14KB3D4R7J RS14KB3D4R7J RD14NB2E101J RD14NB2E4R7J	RD 8.2K J 1/4W FL-PROOF RS 4.7 J 2W FL-PROOF RS 4.7 J 2W RD 100 J 1/4W RD 4.7 J 1/4W	KPYMXT KPYMXT	7
R142 R152 R152 R158 R161		RD14NB2E680J R92-0203-05 R92-0203-05 RD14NB2E101J RD14NB2E470J	RD 68 J 1/4W METAL-PLATE 0.47 K 5W METAL-PLATE 0.47 K 5W RD 100 J 1/4W RD 47 J 1/4W	КРУМХТ	7 6
R162 R163 R163 R164 R164		RD14NB2E101J RD14NB2E470J RD14NB2E470J RD14NB2E101J RD14NB2E101J	RD 100 J 1/4W RD 47 J 1/4W RD 47 J 1/4W RD 100 J 1/4W RD 100 J 1/4W	KPYMXT	7 6 7 6
R165,166 R167 R168-170 R168-170 R169,170		RS14KB3A561J RS14KB3A121J RS14KB3A221J RS14KB3A221J RS14KB3A221J	FL-PR00F RS 560 J 1W FL-PR00F RS 120 J 1W FL-PR00F RS 220 J 1W FL-PR00F RS 220 J 1W FL-PR00F RS 220 J 1W	KPYMXT E	7 7 6 6
R171,172 R176 R186 VR1 -3 VR1 ,2		RS14KB3A391J RS14KB304R7J RD14NB2E222J R12-1617-05 R12-1618-05	FL-PROOF RS 390 J 1W FL-PROOF RS 4.7 J 2W RD 2.2K J 1/4W TRIMMING POT.(2.2K) IDL ADJ TRIMMING POT.(3.3K) IDL ADJ		7 6
VR3		R12-1617-05	TRIMMING POT.(2.2K) IDL ADJ	KPYMXT	6
K1 ,2 K1 ,2 K3 K3 K4		S51-2078-05 S51-2092-05 S76-0005-05 S76-0005-05 S76-0016-05	MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY	KPYMXT	7 6 7
K4 S1		S76-0017-05 S31-2136-05	MAGNETIC RELAY SLIDE SWITCH IMPEDANCE SELECT		7
D1 ,2 D1 ,2 D3 ,4 D3 ,4		HSS104A 1SS131 HZS11N(B2) RD11ES(B2) HZS13N(B2)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		7 7 7
D5 ,6 D7 -18 D7 -18 D9 -18 D9 -18		RD13ES(B2) HSS104A 1SS131 HSS104A 1SS131	ZENER DIODE DIODE DIODE DIODE DIODE	KPYMXT KPYMXT	7 7 7 6 6
D9 ,10 D9 ,10 D15 -18 D15 -18 D19		HSS104A 1SS131 HSS104A 1SS131 HZS5.1N(B2)	DIODE DIODE DIODE DIODE ZENER DIODE	8888	6 6 6
D7 -18 D7 -18 D9 -18 D9 -18 D9 ,10 D9 ,10 D15 -18 D15 -18		HSS104A 1SS131 HSS104A 1SS131 HSS104A 1SS131 HSS104A 1SS131	DIODE	KPYMXT E E E	

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#### \* New Parts

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Ref. No.	Address New	1	Description	Desti- nation	Re-
参照番号	位 還 新	部品番号	部品名/規格		備考
D19 D20 -22 D20 -22 D20 -23 D20 -23		R05.1ES(B2) HSS104A 1SS131 HSS104A 1SS131	ZENER DIODE DIODE DIODE DIODE DIODE	E E KPYMXT KPYMXT	
D20 -24 D20 -24 D25 D25 D26		HSS104A 1SS131 HZS5.1N(B2) RD5.1ES(B2) HSS104A	DIODE DIODE ZENER DIODE ZENER DIODE DIODE		7 7 6 6
D26 D27 D27 D28 D28		1SS131 HZS4.7N(B2) RD4.7ES(B2) D3SBA20F03 RBV-402LFA	DIODE ZENER DIODE ZENER DIODE DIODE DIODE		919
D29 D29 D29 ,30 D29 ,30 D31 ,32		D5SBA20F03 R8V-602LFA D5SBA20F03 R8V-602LFA S5688B	DIODE DIODE DIODE DIODE		6 6 7 7
D31 ,32 D33 D33 D34 D34		1SR139-100 HZS15N(B2) RD15ES(B2) HZS16N(B2) RD16ES(B2)	DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		:
D35 ,36 D35 ,36 D37 ,38 D37 ,38 D39 -42		HSS104A 1SS131 HZS5.1N(B2) RD5.1ES(B2) HSS104	DIODE DIODE ZENER DIODE ZENER DIODE OIODE	E	6
D39 -42 D39 -52 D39 -52 D39 -52 D39 -52		1SS133 HSS104 HSS104 1SS133 1SS133	DIODE DIODE DIODE DIODE	E KPYMXT KPYMXT	6 7 6 7 6
D45 -52 D45 -52 D53 ,54 D53 ,54 D55 ,56		HSS104 1SS133 HZS11N(B2) RD11ES(B2) HZS13N(B2)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE	E	6 7 7 7
D55 ,56 D57 -61 D57 -61 D59 -63 D59 -63		RD13ES(B2) HSS104A 1SS131 HSS104A 1SS131	ZENER DIODE DIODE DIODE DIODE DIODE		7 7 7 6 6
IC1 IC2 Q1 -4 Q5 -8 Q9 ,10	*	TA8409S CXA1558L 2SA992(F,E) 2SC2631(R,S) 2SA1123(R,S)	IC(MOTOR CONTROL) IC TRANSISTOR TRANSISTOR TRANSISTOR		
Q11 ,12 Q13 ,14 Q13 ,14 Q15 ,16 Q15 ,16	*	2SC4137F19(V,W) 2SD2222BT 2SD2449LB 2SB1470BT 2SB1594LB	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		

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New Farts

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Ref. No.	Address New Parts	Parts No.	Description		Re- marks
参照番号	位置新	部品番号	部品名/規格		備考
917 ,18 919 ,20 921 921 922		2SC1845(F,E) 2SA992(F,E) 2SA1175(F,E) 2SA933S(Q,R) 2SC1740S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		7 7 7 7
Q22 Q23 ,24 Q31 -34 Q31 -34		2SC2785(F,E) 2SC1845(F,E) 2SA992(F,E) 2SA992(F,E) 2SC2631(R,S)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	КРҮМХТ	7 7 6 7
Q35 Q36 Q36 Q37 Q37		2SC2631(R,S) 2SC1845(F,E) 2SC1845(F,E) 2SC2631(R,S) 2SC2631(R,S)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT KPYMXT KPYMXT	7
Q38 Q38 Q39 Q39 Q40		2SC1845(F,E) 2SC1845(F,E) 2SA1123(R,S) 2SA1123(R,S) 2SA992(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT KPYMXT	7
Q40 Q41 ,42 Q41 ,42 Q43		2SA992(F,E) 2SC4137F19(V,W) 2SC4137F19(V,W) 2SD2255BT 2SD2255BT*1	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT KPYMXT K	6 7 6
Q43 Q43 Q44 Q44 Q45	*	2SD2384LB 2SD2384LB 2SD2340BT 2SD2340BT 2SB1493BT	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	PYMXT PYMXTE KPYMXT	6 7 6 7
Q45 Q45 Q45 Q46 Q46	*	2SB1493BT*1 2SB1555LB 2SB1555LB 2SB1531BT 2SB1531BT	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	K PYMXT PYMXTE KPYMXT	
Q47 -50 Q47 -50 Q49 ,50 Q51 Q52		2SC1845(F,E) 2SC1845(F,E) 2SC1845(F,E) 2SA992(F,E) 2SC1845(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT E	7 6 6
953 953 955 956 -58 956 -58		2SC1740S(Q,R) 2SC2785(F,E) 2SA992(F,E) 2SC1740S(Q,R) 2SC2785(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT KPYMXT	2 520
956 -61 956 -61 956 ,57 956 ,57 960 ,61		2SC1740S(Q,R) 2SC2785(F,E) 2SC1740S(Q,R) 2SC2785(F,E) 2SC1740S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	E E	7 7 6 6 6
960 ,61 962 962 963 963		2SC2785(F,E) DTC124ES UN4212 2SA1175(F,E) 2SA933S(Q,R)	TRANSISTOR DIGITAL TRANSISTOR DIGITAL TRANSISTOR TRANSISTOR TRANSISTOR		6

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6: KR-V6050 M:Other Areas 7: KR-V7050

#### × New Parts

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Ref. N		Address	New Parts				s No							tion	14	Desti- nation	Re- marks
参照和	# 号	位置	新	·	# 	品	番	·号 		平	56		<u> </u>	⁄ 規 ———	格	仕 向	備考
Q64 -6 Q64 -6 Q65 ,6 Q68	7			2SC 2SC 2SC 2SA	28 28 15	78( 78( 344	(B) (B)			TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR						KPYMXT E	7 6 6
		ACC	ES						(X	13-719X-X	X	) :	K	R-\	/7050	<del></del>	T
01				830						LED(LN21CP	SL)						
C1 C2 C3 C4 C5 ,6				CE0 C91 C90 CE0 CE0	-0 -1 4L	769 827 W1 <i>8</i>	7-09 7-09 110	5 5 1 M		ELECTRO CERAMIC BACKUP ELECTRO ELECTRO		0.		UF 17F JF	35WV K 5.5WV 10WV 35WV	TE	
C7 C8 C9 -1 C12,1		:		CEO CEO C91 CF9 C91	4L -0 2F	₩1F 769 V1F	1330 9-05 122	0 <b>M</b> 5 3J		ELECTRO ELECTRO CERAMIC MF CERAMIC		3: 0: 0:		: LUF 22UF	16WV 50WV K J K	TE	
C21 ,2 C23 ,2 C25 ,2 C27 ,2 C29 -3	6 8			CEO CEO CF9 CC4 CC4	4L 2F 5F	₩1H V1H SL1	1010 1473 LH23	OM 3J 21J		ELECTRO ELECTRO MF CERAMIC CERAMIC		1 . 0 . 22	7UF . OU . O4 2OF 7PF	JF 17UF PF	16WV 50WV J J J		
C33,3 C35 C36 C37 -3				C90 CE0 C90 CE0 C90	4L -3 4L	W1H 253 W1H	1010 3-09 1100	MC 5 MC		ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO		1011	UF UF OUE	JF :	50WV 50WV 50WV 50WV 16WV		
C50 C51 C52 C53 ,5	4			C91 CK4 CE0 CE0 CK4	5F 4E 4L	F1H W1E W1/	110: 233 447	3Z 1 M 0 M		FILM CERAMIC ELECTRO ELECTRO CERAMIC		0 3 4	. 01 301 7UF				
C63,6 C65 C201 C202 C203,2				CF9 CF9 CE0 CK4	2F 2F 4L	V1H V1H W1V	110 127 /10	4J 1K OM		MF MF ELECTRO CERAMIC		0 2 1	. 10 708 0UB		J J K 35₩V Z	TE TE TE	
C205 C206,2 C208 C209-2				CEO CC4 CEO CK4	5F 4L	CH: W1	1H2 /10	70J O <b>m</b>		ELECTRO CERAMIC ELECTRO CERAMIC		2	0UE 7PE 0UE	7	35WV J 35WV Z	TE TE TE	
CN1 CN1		2B 2B		E40 E40						FLAT CABLE						KPX YMTE	
CN5 J2 J3 ,4		2C		E40 E03 E03	-4 -0	199 11	9-0: 1-0:	5 5		FLAT CABLE AC OUTLET AC OUTLET	C	ואפ	NCT	ror		KPY ME	
J3 ,4				E03				_		AC OUTLET						т	
F1 F1 ,2 F2 F2 ,3	2			F05 F05 F05	-2 -2	52 52	5-0 5-0	5 5		FUSE (UL) FUSE (SEMK FUSE (SEMK FUSE (SEMK	<b>0</b> )		()	250V 250V	6A) T2.5A) T2.5A) T2.5A)	KP YM XT E	
CN7 -1 CN7 ,8 CN11,1	3			J13 J13 J13	-0	07	5-0	5		FUSE CLIP FUSE CLIP FUSE CLIP						E YMXT KPYM	

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	Ref. No.	Address	Parts		Description	nation	Re- marks
	参照番号	位置	新	部品番号	部品名/規格	仕 向	備考
حإحا حا	L1 -3 L201,202 T1 T1 T1			L40-1091-17 L40-1001-17 L01-7651-05 L01-7653-05 L01-7657-05	SMALL FIXED INDUCTOR(10UH,K) SMALL FIXED INDUCTOR(10UH,K) POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	KPYMX TE KP YM XTE	
	X1 X201 X202			L78-0267-05 L77-2002-05 L78-0503-05	RESONATOR 4.194MHz CRYSTAL RESONATOR 4.332MHz RESONATOR 4.00MHz	TE TE	
	CP1 R81 ,82 R104 VR1 ,2 VR3		*	R90-0492-05 RD14NB2E101J R92-0173-05 R10-3048-05 R29-5075-05	MULTI-COMP 100KX8 J 1/6W RD 100 J 1/4W RC 2.2M M 1/2W POTENTIOMETER(10KX2) BASS,TREB POTENTIOMETER(100KX4)VOLUME	KP	
	VR4 VR5		*	R05-5053-05 R10-5063-05	POTENTIOMETER(200K) BALANCE POTENTIOMETER(100KX2)LOUNDNESS		
<u>.</u>	K1 S1 -36 S1 -39 S50 ,51			\$76-0002-05 \$40-1064-05 \$40-1064-05 \$62-0001-05	MAGNETIC RELAY PUSH SWITCH KEY BOARD PUSH SWITCH KEY BOARD SLIDE SWITCH VOLTAGE SELECTOR	KPYMX TE YM	
	S40	p .		T99-0509-05	SPEED DETECTOR INPUT SELECTOR		
	D2 -18 D2 -18 D19 D19 D20			HSS104 1SS133 HZS2.7N(B2) RD2.7ES(B2) HZS5.1N(B2)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		
	D20 D31 D31 D32 D32 ,33			RD5.1ES(B2) HSS104 1SS133 HSS104 HSS104	ZENER DIODE DIODE DIODE DIODE DIODE	KP KP X TE	
	D36 D40 -43 D40 -43 D44 D44			HSS104 S5688B 1SR139-100 HSS104 1SS133	DIODE DIODE DIODE DIODE DIODE	YM	
	D45 D45 ED1 IC1 IC2		* *	HZS6.2N(B2) RD6.2ES(B2) 10-MT-58GK UPD78044GF-021 PST529C	ZENER DIODE ZENER DIODE INDICATOR TUBE IC(8BIT MICROPROCESSOR) IC(SYSTEM RESET)		
	IC3 IC201 IC202 Q1 ,2			NJM4565L TDA7330A LC6543H-4600 2SC1740S(Q,R) 2SC2785(F,E)	IC(0P AMP X2) IC(RDS DEMODULATOR) IC TRANSISTOR TRANSISTOR	TE TE	
	93 94 95			2SA1175(F,E) 2SC2003(L,K) 2SC3940A(R,S)	TRANSISTOR TRANSISTOR TRANSISTOR	YM	
	A1 A1			W02-1046-05 W02-1153-05	ELECTRIC CIRCUIT MODULE ELECTRIC CIRCUIT MODULE		
-	D1 T	AC	CE		X13-720X-XX) KR-V6050		
L	D1			B30-1291-05	LED(LN21CPSLX(V)-(TA4))		

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Ref. No.	Address	New	Parts	No.		Description		Desti- nation	Re- marks
参照番号	位 置	新		番号	部	品名/規	格		備考
C1 C2 C3 C4 C5 ,6			CE04LW1V C91-0769 C90-1827 CE04LW1A CE04LW1V	-05 -05 101M	ELECTRO CERAMIC BACKUP ELECTRO ELECTRO	4.7UF 0.01UF 0.047F 100UF 4.7UF	35WV K 5.5WV 10WV 35WV	TE	
C7 C8 C9 -11 C12 ,13 C14			CE04LW1C CE04LW1H C91-0769 CF92FV1H C91-0745	330M -05 223J	ELECTRO ELECTRO CERAMIC MF CERAMIC	33UF 33UF 0.01UF 0.022UF 100PF	16WV 50WV K J K	TE	
C21 ,22 C23 ,24 C25 ,26 C27 ,28 C29 -32			CE04LW1C CE04LW1H CF92FV1H CC45FSL1 CC45FSL1	010M 473J H221J	ELECTRO ELECTRO MF CERAMIC CERAMIC	47UF 1.0UF 0.047UF 220PF 47PF	16WV 50WV J J J		
C33 ,34 C35 C36 C37 -39 C40			C90-3253 CE04LW1H C90-3253 CE04LW1H C90-3225	010M -05 100M	ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO	1 UF 1 . OUF 1 UF 1 OUF 1 OUF	50WV 50WV 50WV 50WV 16WV		
C50 C51 C52 C53 ,54			C91-1439 CK45FF1H CE04EW1E CE04LW1A CK45FF1H	103Z 331M 470M	FILM CERAMIC ELECTRO ELECTRO CERAMIC	0.01UF 0.010UF 330UF 47UF 0.010UF	250VAC Z 25WV 10WV Z		
C63,64 C65 C201 C202 C203,204			CF92FV1H CF92FV1H CF92FV1H CE04LW1V CK45FF1H	104J 271K 100M	MF MF ELECTRO CERAMIC	0.033UF 0.10UF 270PF 10UF 0.010UF	J J K 35WV Z	TE TE TE	
C205 C206,207 C208 C209-211			CEO4LW1V CC45FCH1I CEO4LW1V CK45FF1H	H270J 100M	ELECTRO CERAMIC ELECTRO CERAMIC	10UF 27PF 10UF 0.010UF	35WV J 35WV Z	TE TE TE TE	
CN1 CN1 CN5 J2 J3 ,4	28 28 2C		E40-4203 E40-4207 E40-4199 E03-0111 E03-0108	-05 -05 -05	FLAT CABLE FLAT CABLE FLAT CABLE AC OUTLET AC OUTLET	CONNCTOR		KPX YMTE KPY ME	
J3 ,4			E03-0109	-05	AC QUTLET			т	
F1 F1 ,2 F2 F2 ,3			F05-6029 F05-2525 F05-2525 F05-2525	-05 -05	FUSE (UL) FUSE (SEMKO FUSE (SEMKO FUSE (SEMKO	(250V	6A) T2.5A) T2.5A) T2.5A)	KP YM XT E	
CN7 -10 CN7 ,8 CN11,12			J13-0075- J13-0075- J13-0075-	-05	FUSE CLIP FUSE CLIP FUSE CLIP			E YMXT KPYM	
L1 -3 L201,202 T1 T1 T1			L40-1091 L40-1001 L01-7651 L01-7653 L01-7657	-17 -05 -05	SMALL FIXED SMALL FIXED POWER TRANS POWER TRANS POWER TRANS	INDUCTOR( FORMER FORMER	10UH,K)	KPYMX TE KP YM XTE	
X1			L78-0267	-05	RESONATOR	4.1	94MHz		

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9	Ref. No.	Address	New Parts	Parts No.	Description	Desti- Re-
	参照番号	位 置	新	部品番号	部品名/規格	仕 向 備考
	X201 X202			L77-2002-05 L78-0503-05	CRYSTAL RESONATOR 4.332MHz RESONATOR 4.00MHz	TE TE
2 2	CP1 R81 ,82 R104 VR1 ,2 VR3		*	R90-0492-05 R014NB2E101J R92-0173-05 R10-3048-05 R29-5075-05	MULTI-COMP 100KX8 J 1/6W RD 100 J 1/4W RC 2.2M M 1/2W POTENTIOMETER(10KX2) BASS,TREB POTENTIOMETER(100KX4)VOLUME	KP
	VR4 VR5		*	R05-5053-05 R10-5063-05	POTENTIOMETER(200K) BALANCE POTENTIOMETER(100KX2)LOUNDNESS	
	K1 S1 -23 S1 -32 S37 -39 S50 ,51			\$76-0002-05 \$40-1064-05 \$40-1064-05 \$40-1064-05 \$62-0001-05	MAGNETIC RELAY PUSH SWITCH KEY BOARD PUSH SWITCH KEY BOARD PUSH SWITCH KEY BOARD SLIDE SWITCH VOLTAGE SELECTOR	E KPYMXT TE YM
	S40			T99-0509-05	SPEED DETECTOR INPUT SELECTOR	
	D2 -18 D2 -18 D19 D19 D20			HSS104 1SS133 HZS2.7N(B2) RD2.7ES(B2) HZS5.1N(B2)	DIODE DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE	
	D20 D31 D31 D32 D32			RD5.1ES(B2) HSS104 1SS133 HSS104 1SS133	ZENER DIODE DIODE DIODE DIODE DIODE	KP KP X
	032 -34 032 -34 032 ,33 032 ,33			HSS104 1SS133 HSS104 1SS133 HSS104	DIODE DIODE DIODE DIODE	T T E E KPYMX
	D34 D35 D35 D36 D36			1SS133 HSS104 1SS133 HSS104 1SS133	DIODE DIODE DIODE DIODE	KPYMX E E YM YM
	D40 -43 D40 -43 D44 D44 D45	•		S5688B 1SR139-100 HSS104 1SS133 HZS6.2N(B2)	DIODE DIODE DIODE DIODE ZENER DIODE	
	D45 ED1 IC1 IC2 IC3		*	RD6.2ES(B2) 10-MT-58GK UPD78044GF-021 PST529C NJM4565L	ZENER DIODE INDICATOR TUBE IC(8BIT MICROPROCESSOR) IC(SYSTEM RESET) IC(OP AMP X2)	
	IC201 IC202 Q1 ,2 Q1 ,2 Q3			TDA7330A LC6543H-4600 2SC1740S(Q,R) 2SC2785(F,E) 2SA1175(F,E)	IC(RDS DEMODULATOR) IC TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	TE TE YM
	Q3 Q4 Q5			2SA933S(Q,R) 2SC2003(L,K) 2SC3940A(R,S)	TRANSISTOR TRANSISTOR TRANSISTOR	YM

L:Scandinavia

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P:Canada T:England **E**:Europe

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Ref. No.	Address New	is	Description	Desti- Re- nation marks
参照番号 A1	位置新	W02-1046-05	部品名/規格 ELECTRIC CIRCUIT MODULE	仕 向 備考
A1	L F	w02-1153-05 RECEIVER UNIT	(X14-368X-XX)	
C1 -4 C5 C6 C7 C8		CK45FF1H103Z CE04LW1C470M CK45FF1H103Z CE04LW1H010M CE04LW1HR47M	CERAMIC 0.010UF Z ELECTRO 47UF 16WV CERAMIC 0.010UF Z ELECTRO 1.0UF 50WV ELECTRO 0.47UF 50WV	
C9 C10 C11 C12 C13		CC45FSL1H101J CE04LW1H2R2M CE04LW1H3R3M CK45FF1H103Z CQ92FM1H153J	CERAMIC 100PF J ELECTRO 2.2UF 50WV ELECTRO 3.3UF 50WV CERAMIC 0.010UF Z MYLAR 0.015UF J	
C14 ,15 C16 C17 C18 C19		CK45FF1H223Z CE04LW1V4R7M CK45FF1H223Z CE04LW1V100M CK45FF1H103Z	CERAMIC   0.022UF Z   ELECTRO   4.7UF   35WV   CERAMIC   0.022UF Z   ELECTRO   10UF   35WV   CERAMIC   0.010UF Z	
C20 C21 C27 ,28 C27 ,28 C27 ,28		CE04LW1V4R7M CE04LW1C101M CQ92FM1H153J CQ92FM1H183J CQ92FM1H392J	ELECTRO 4.7UF 35WV ELECTRO 100UF 16WV MYLAR 0.015UF J MYLAR 0.018UF J MYLAR 3900PF J	YMX KP TE
C29 ,30 C40 C41 C42 C43 -45		CE04LW1H2R2M CK45FF1H103Z CC45FCH1H220J CC45FCH1H270J CK45FB1H471K	ELECTRO 2.2UF 50WV CERAMIC 0.010UF Z CERAMIC 22PF J CERAMIC 27PF J CERAMIC 470PF K	
C46 ,47 C48 C49 C50 C51		CK45FF1H103Z CQ92FM1H223J CE04LW1H010M CE04LW1C470M CE04LW1H010M	CERAMIC 0.010UF Z MYLAR 0.022UF J ELECTRO 1.0UF 50WV ELECTRO 47UF 16WV ELECTRO 1.0UF 50WV	
C52 C56 C62 -64 C65 C66		CE04LW1A470M CC45FCH1H220J CE04LW1H010M CE04LW1HR22M CE04LW1V100M	ELECTRO 47UF 10WV CERAMIC 22PF J ELECTRO 1.0UF 50WV ELECTRO 0.22UF 50WV ELECTRO 10UF 35WV	
C67,68 C67,68 C69 C70		CC45FSL1H101J CC45FSL1H221J CE04LW1V100M CK45FB1H561K CQ92FM1H103J	CERAMIC 100PF J CERAMIC 220PF J ELECTRO 10UF 35WV CERAMIC 560PF K MYLAR 0.010UF J	KPYMX TE
C83 C84,85 C106 C107 C123		CK45FB1H471K C91-0745-05 CE04LW1C470M CK45FF1H473Z CE04LW1HOR1M	CERAMIC 470PF K CERAMIC 100PF K ELECTRO 47UF 16WV CERAMIC 0.047UF Z ELECTRO 0.1UF 50WV	TE
C135,136 C172 C173,174 C176 C177		CQ92FM1H682J CC45FSL1H330J CK45FB1H102K CK45FB1H102K CE04LW1A470M	MYLAR 6800PF J CERAMIC 33PF J CERAMIC 1000PF K CERAMIC 1000PF K ELECTRØ 47UF 10WV	YM TE TE KPYMX 6 TE
C178		CK45FF1H103Z	CERAMIC 0.010UF Z	TE

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参照番号		Parts 新		番号	部	品名/規	格	nation	marks 備考
C179,180 C181 C182 C201,202 C201,202		*	CE04LW1V CK45FF1H CC45FSL1 CC45FSL1 CC45FSL1	103Z H150J H390J	ELECTRO CERAMIC CERAMIC CERAMIC CERAMIC	10UF 0.010UF 15PF 39PF 39PF	35WV Z J J	E	6 7
C203,204 C205,206 C207,208 C209,210 C211,212			CE04LW1V CC45FSL1 CE04LW1A CK45FB1H CQ92FM1H	H221J 101M 102K	ELECTRO CERAMIC ELECTRO CERAMIC MYLAR	10UF 220PF 100UF 1000PF 0.012UF	35WV J 10WV K J		
C213,214 C215,216 C219 C220 C221-236			CQ92FM1H CE04LW1V CK45FB1H CK45FF1H C91-0749	4R7M 681K 103Z	MYLAR ELECTRO CERAMIC CERAMIC CERAMIC	3300PF 4.7UF 680PF 0.010UF 220PF	J 35WV K Z K	TE	
C223,224 C223,224 C227,228 C227,228 C231,232			C91-0749 C91-0749 C91-0749 C91-0749 C91-0749	-05 -05 -05	CERAMIC CERAMIC CERAMIC CERAMIC CERAMIC	220PF 220PF 220PF 220PF 220PF	K K K K	KPYMX KPYMXT KPYMX KPYMXT KPYMX	7 6 7 6 7
C231,232 C237,238 C239-242 C239,240 C239,240			C91-0749 CE04LW1V- CC45FSL1I CC45FSL1I CC45FSL1I	4R7M H221J H221J	CERAMIC ELECTRO CERAMIC CERAMIC CERAMIC	220PF 4.7UF 220PF 220PF 220PF	K 35WV J J	KPYMXT TE KPYMX KPYMXT	6 7 6
C243 C244 C245,246 C247,248 C249,250			CC45FSL1F CK45FF1H CE04LW1V CE04LW1C CK45FF1H	103Z 100M 101M	CERAMIC CERAMIC ELECTRO ELECTRO CERAMIC	100PF 0.010UF 10UF 100UF 0.010UF	J Z 35WV 16WV . Z		
C251,252 C253 C254 C255 C256			CE04LW1C4 CK45FB1H1 CE04LW1C4 CK45FB1H1 CE04LW1C4	102K 170M 102K	ELECTRO CERAMIC ELECTRO CERAMIC ELECTRO	47UF 1000PF 47UF 1000PF 47UF	16WV K 16WV K 16WV		
C257 C258 C259 C260 C261			CK45FB1H1 CE04LW1C4 CE04LW1V1 CE04LW1H2 CE04LW1V1	70M .00M !R2M	CERAMIC ELECTRO ELECTRO ELECTRO ELECTRO	1000PF 47UF 10UF 2.2UF 10UF	K 16WV 35WV 50WV 35WV		
C262 C263-270 C271 C301,302 C301,302			CC45FSL1H CK45FF1H1 CE04LW1A1 CE04LW1V1 CE04LW1V1	03Z 01M 00M	CERAMIC CERAMIC ELECTRO ELECTRO ELECTRO	100PF 0.010UF 100UF 10UF 10UF	J Z 10WV 35WV 35WV	КРҮМХТ	7 6
C303,304 C303,304 C305,306 C305,306 C307			CF92FV1H2 CF92FV1H2 CE04LW1V4 CE04LW1V4 CE04LW1V1	24J R7M R7M	MF MF ELECTRO ELECTRO ELECTRO	0.22UF 0.22UF 4.7UF 4.7UF 10UF	J J 35WV 35WV 35WV	KPYMXT KPYMXT	7 6 7 6 7
C307 C308 C308 C309,310 C309,310			CE04LW1V1 CQ92FM1H6 CQ92FM1H6 CK45FF1H1 CK45FF1H1	82J 82J 03Z	ELECTRO MYLAR MYLAR CERAMIC CERAMIC	10UF 6800PF 6800PF 0.010UF 0.010UF	35WV J J Z Z	KPYMXT KPYMXT KPYMXT	6 7 6 7 6

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#### × New Parts

#### **PARTS LIST**

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Ref. No.	Address	New Parts		ts No.		Description		Desti- nation	Re- marks
参照番号	位 置	新		品番号	部	品名/規	格		備考
C311 C311 C312 C312 C313-315			CE04LW CE04LW CF92FV CF92FV CE04LW	1A101M 1H104J 1H104J	ELECTRO ELECTRO MF MF ELECTRO	100UF 100UF 0.10UF 0.10UF 10UF	10WV 10WV J J 35WV	KPYMXT KPYMXT	7 6 7 6 7
C313-315 C316 C316 C317 C317			CEO4LW CF92FV CF92FV CEO4LW CEO4LW	1H1O4J 1H1O4J 1H01OM	ELECTRO MF MF ELECTRO ELECTRO	10UF 0.10UF 0.10UF 1.0UF 1.0UF	35WV J J 50WV 50WV	KPYMXT KPYMXT KPYMXT	7 6 7
C318-321 C318-321 C322-325 C322-325 C326,327			CQ92FM: CQ92FM: CF92FV: CF92FV: CF92FV:	1H223J 1H334J 1H334J	MYLAR MYLAR MF MF MF	0.022UF 0.022UF 0.33UF 0.33UF 0.22UF	] ] ]	КРҮМХТ КРҮМХТ	7 6 7 6 7
C326,327 C328 C328 C329,330 C329,330		25 20	CF92FV1 CK45FB1 CK45FB1 CF92FV1 CF92FV1	1H681K 1H681K 1H104J	MF CERAMIC CERAMIC MF MF	0.22UF 680PF 680PF 0.10UF 0.10UF	J K K J	KPYMXT KPYMXT KPYMXT	7 6 7
C331 C331 C332,333 C332,333 C334			CK45FB1 CK45FB1 CF92FV1 CF92FV1 CK45FF1	LH681K LH104J LH104J	CERAMIC CERAMIC MF MF CERAMIC	680PF 680PF 0.10UF 0.10UF 0.010UF	K K J Z	KPYMXT KPYMXT	7 6 7 6 7
C334 C335 C335 C336 C336			CK45FF1 CE04LW1 CE04LW1 CF92FV1	LA101M LA101M LH104J	CERAMIC ELECTRO ELECTRO MF MF	0.010UF 100UF 100UF 0.10UF 0.10UF	Z 10WV 10WV J J	KPYMXT	6 7 6 7 6
C337 C337 C338 C338 C339			CEO4HW1 CEO4LW1 CEO4LW1 CEO4LW1	LE4R7M LV100M LV100M	NP-ELEC NP-ELEC ELECTRO ELECTRO MF	4.7UF 4.7UF 10UF 10UF 0.10UF	25WV 25WV 35WV 35WV J	KPYMXT KPYMXT	7 6 7 6 7
C339 C340,341 C340,341 C342 C342				.1H101J .1H101J .H010M	MF CERAMIC CERAMIC ELECTRO ELECTRO	0.10UF 100PF 100PF 1.0UF 1.0UF	J 50WV 50WV	KPYMXT KPYMXT KPYMXT	6 7 6 7 6
C344 C344 C345,346 C345,346 C347			CEO4LW1 CEO4LW1 CEO4LW1 CEO4LW1 CC45FSL	V100M HR22M HR22M	ELECTRO ELECTRO ELECTRO ELECTRO CERAMIC	10UF 10UF 0.22UF 0.22UF 100PF	35WV 35WV 50WV 50WV J	KPYMXT KPYMXT	7 6 7 6 7
C347 C348 C348 C349 C349			CC45FSL CE04LW1 CE04LW1 CE04LW1	H010M H010M LV4R7M	CERAMIC ELECTRO ELECTRO ELECTRO ELECTRO	100PF 1.0UF 1.0UF 4.7UF 4.7UF	J 50WV 50WV 35WV 35WV	KPYMXT KPYMXT KPYMXT	6 7 6 7 6
C350 C350 C351 C351 C352			CQ92FM1 CQ92FM1 CQ92FM1 CQ92FM1 CK45FB1	H103J H123J H123J	MYLAR MYLAR MYLAR MYLAR CERAMIC	0.010UF 0.010UF 0.012UF 0.012UF 820PF	K J J	KPYMXT KPYMXT	7 6 7 6 7

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Ref. No.	Address Ne		Description	Desti- Re- nation marks
参照番号	位置新		部品名/規格	仕 向備考
C352 C353 C353 C354 C354		CK45FB1H821K CQ92FM1H103J CQ92FM1H103J CQ92FM1H123J CQ92FM1H123J	CERAMIC 820PF K MYLAR 0.010UF J MYLAR 0.010UF J MYLAR 0.012UF J MYLAR 0.012UF J	KPYMXT 6 7 KPYMXT 6 KPYMXT 6
C355 C355 C356 C3 <b>56</b> C3 <b>57</b>		CK45FB1H821K CK45FB1H821K CE04LW1V4R7M CE04LW1V4R7M CE04LW1A101M	CERAMIC 820PF K CERAMIC 820PF K ELECTRO 4.7UF 35WV ELECTRO 4.7UF 35WV ELECTRO 100UF 10WV	KPYMXT 6 7 6 7 6 7
C357 C358 C358 C359 C359		CE04LW1A101M CQ92FM1H392J CQ92FM1H392J CE04LW1A101M CE04LW1A101M	ELECTRO 100UF 10WV MYLAR 3900PF J MYLAR 3900PF J ELECTRO 100UF 10WV ELECTRO 100UF 10WV	KPYMXT 6 7 KPYMXT 6 KPYMXT 6
C360 C360 C361 C361 C362		CF92FV1H104J CF92FV1H104J CE04LW1A101M CE04LW1A101M CE04LW1V100M	MF 0.10UF J MF 0.10UF J ELECTRO 100UF 10WV ELECTRO 100UF 10WV ELECTRO 10UF 35WV	KPYMXT 6 7 6 7 7 6 7 7 6 7 7
C362 C363 C363 C364 C364		CE04LW1V100M CE04LW1A101M CE04LW1A101M CF92FV1H104J CF92FV1H104J	ELECTRO 10UF 35WV ELECTRO 100UF 10WV ELECTRO 100UF 10WV MF 0.10UF J MF 0.10UF J	KPYMXT 6 7 KPYMXT 6 KPYMXT 6
C365 C365 C366 C366 C367,368		CK45FF1H103Z CK45FF1H103Z CE04LW1A101M CE04LW1A101M CE04LW1V100M	CERAMIC 0.010UF Z CERAMIC 0.010UF Z ELECTRO 100UF 10WV ELECTRO 100UF 10WV ELECTRO 10UF 35WV	KPYMXT 6 7 7 KPYMXT 6 7
C367,368 C369 C369 C370		CE04LW1V100M CC45FSL1H101J CC45FSL1H101J CQ92FM1H222J CQ92FM1H222J	ELECTRO 10UF 35WV CERAMIC 100PF J CERAMIC 100PF J MYLAR 2200PF J MYLAR 2200PF J	KPYMXT 6 7 KPYMXT 6 KPYMXT 6
C371 C371 C372 C372 C373		CQ92FM1H102J CQ92FM1H102J CE04LW1V100M CE04LW1V100M CE04LW1H010M	MYLAR 1000PF J MYLAR 1000PF J ELECTRO 10UF 35WV ELECTRO 10UF 35WV ELECTRO 1.0UF 50WV	KPYMXT 6 7 7 6 7 7 6 7 7
C373 C374 C374 C375 C375		CE04LW1H010M CE04LW1C470M CE04LW1C470M CF92FV1H104J CF92FV1H104J	ELECTRO	KPYMXT 6 7 KPYMXT 6 KPYMXT 6
C376 C376 C377 C377 C378		CF92FV1H334J CF92FV1H334J CF92FV1H333J CF92FV1H333J CQ92FM1H472J	MF 0.33UF J MF 0.33UF J MF 0.033UF J MF 0.033UF J MYLAR 4700PF J	KPYMXT 6 7 6 7 6 7 6 7
C378 C379 C379 C380 C380		CQ92FM1H472J CF92FV1H273J CF92FV1H273J CE04LW1C22OM CE04LW1C22OM	MYLAR 4700PF J MF 0.027UF J MF 0.027UF J ELECTRO 22UF 16WV ELECTRO 22UF 16WV	KPYMXT 6 7 KPYMXT 6 7 KPYMXT 6

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Ref. No.	Address		1	arts	No.		Ε	Description		Desti- nation	Re-
参照番号	位 置	Parts 新	部	品	番号	ä	# F	品名/規	格		備考
C381 C381 C382 C382 C383			CE04L CE04L CQ92FI CQ92FI CE04L	√1A √1H √11H	101M 822J 822J	ELECTRO ELECTRO MYLAR MYLAR ELECTRO		100UF 100UF 8200PF 8200PF 10UF	10WV 10WV J J 35WV	KPYMXT KPYMXT	7
C383 C384 C384 C385 C385			CEO4LI CEO4LI CEO4LI CEO4LI	√1H √1H √1H	010M 010M 0R1M	ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO		10UF 1.0UF 1.0UF 0.1UF 0.1UF	35WV 50WV 50WV 50WV 50WV	KPYMXT KPYMXT KPYMXT	7 6 7
C386 C386 C387 C387 C388			CC45FS CC45FS CEO4LS CEO4LS	SL 1 V1 V V1 V	H101J 4R7M 4R7M	CERAMIC CERAMIC ELECTRO ELECTRO ELECTRO		100PF 100PF 4.7UF 4.7UF 0.1UF	J J 35WV 35WV 50WV	<b>КРҮМ</b> ХТ <b>КРҮМ</b> ХТ	7
C388 C389 C389 C390 C390			CEO4LY CEO4LY CEO4LY CEO4LY	∤1∨ ∤1∨ ∤1H	4R7M 4R7M OR1M	ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO		0.1UF 4.7UF 4.7UF 0.1UF 0.1UF	50WV 35WV 35WV 50WV 50WV	KPYMXT KPYMXT KPYMXT	7 6 7
C391 C391 C392 C392 C393			CEO4LY CEO4LY CC45FS CC45FS CEO4LY	/1 V SL 1 SL 1	4R7M H101J H101J	ELECTRO ELECTRO CERAMIC CERAMIC ELECTRO		4.7UF 4.7UF 100PF 100PF 0.1UF	35WV 35WV J J 50WV	KPYMXT KPYMXT	7
C393 C394 C394 C395,396 C395,396			CEO4LY CEO4LY CEO4LY CEO4LY	/1 V /1 V /1 V	4R7M 4R7M 100M	ELECTRO ELECTRO ELECTRO ELECTRO ELECTRO		0.1UF 4.7UF 4.7UF 10UF 10UF	50WV 35WV 35WV 35WV 35WV	KPYMXT KPYMXT KPYMXT	7 6 7
C397 C397 C398 C398 C399			CK45FE CK45FE CEO4LY CEO4LY CQ92FN	11H 11H 11H	102K 010M 010M	CERAMIC CERAMIC ELECTRO ELECTRO MYLAR		1000PF 1000PF 1.0UF 1.0UF 3900PF	K 50WV 50WV J	KPYMXT KPYMXT	7 6 7 6 7
C399 C401-403 C404 C405 C406			C992FN C90-32 CE04LW CK45FF CE04LW	42 11E 1H	-05 101M 103Z	MYLAR ELECTRO ELECTRO CERAMIC ELECTRO		3900PF 4.7UF 100UF 0.010UF 10UF	J 35WV 25WV Z 35WV	KPYMXT	6 7 7 7
C408 C409 C410 C411 C412			CEO4LW CEO4LW CQ92FM CK45FE CQ92FM	11 V 11 H 11 H	4R7M 103J 821K	ELECTRO ELECTRO MYLAR CERAMIC MYLAR		10UF 4.7UF 0.010UF 820PF 0.012UF	35WV 35WV J K J		77777
C413 C414 C415 C416 C417			CQ92FM CK45FE CQ92FM C90-32 C90-32	1H 1H 42	821K 123J -05	MYLAR CERAMIC MYLAR ELECTRO ELECTRO		0.010UF 820PF 0.012UF 4.7UF 100UF	J K J 35WV 4WV		7 7 7 7 7
C418 C419 C420,421 C422,423 C424			CQ92FM CE04LW CF92FV CE04LW CC45FS	1 A 1 H 1 A	101M 104J 101M	MYLAR ELECTRO MF ELECTRO CERAMIC		3900PF 100UF 0.10UF 100UF 100PF	J 10WV J 10WV J		77777

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参照番号	位置	新	部品番号	部品名/規格		備考
C425 C426 C427 C428 C429			CQ92FM1H123J CQ92FM1H112J CQ92FM1H133J CQ92FM1H123J CQ92FM1H112J	MYLAR 0.012UF J MYLAR 1100PF J MYLAR 0.013UF J MYLAR 0.012UF J MYLAR 1100PF J		7 7 7 7 7
C430 C431,432 C433,434 C435 C442			CQ92FM1H133J CE04LW1H010M CC45FSL1H100D CE04LW1V100M CE04LW1V100M	MYLAR 0.013UF J ELECTRO 1.0UF 50WV CERAMIC 10PF D ELECTRO 10UF 35WV ELECTRO 10UF 35WV		7 7 7 7 7
C443,444 C445,446 C447 C448 C501-506		*	CE04LW1HR1M CE04LW1V100M CK45FB1H102K CC45FSL1H101J CQ92FM1H102J	ELECTRO 0.1MUF 50WV ELECTRO 10UF 35WV CERAMIC 1000PF K CERAMIC 100PF J MYLAR 1000PF J		77777
C501-506 C507 C507			CQ92FM1H102J CE04LW1V100M CE04LW1V100M	MYLAR 1000PF J ELECTRO 10UF 35WV ELECTRO 10UF 35WV	KPYMXT KPYMXT	7
CN3 CN3 J1 J1 J201	18 18		E40-4163-05 E40-4167-05 E20-0321-05 E20-0476-05 E63-0068-05	FLAT CABLE CONNCTOR FLAT CABLE CONNCTOR LOCK TERMINAL BOARD ANTENNA LOCK TERMINAL BOARD ANTENNA PHONO JACK PHONO	KPX YMTE TE KPYMX	
J202,203			E63-0070-05	PHONO JACK CD, TAPE, VIDEO		
-			J11-0098-05	WIRE CLAMPER		6
CF1 ,2 CF1 ,2 L1 L2 L2			L72-0531-05 L72-0536-05 L30-0467-05 L30-0439-25 L30-0484-05	CERAMIC FILTER CERAMIC FILTER AM IFT FM IFT FM IFT	KPYMX TE KP TE	
L2 L3 L6 ,7 L8			L30-0494-05 L40-1021-14 L79-0790-05 L40-1091-17 L30-0485-05	FM IFT SMALL FIXED INDUCTOR(1.0MH,K) LC FILTER SMALL FIXED INDUCTOR FM IFT	YMX TE TE	
L10 L11 -13 L106 L107 L108			L40-1091-17 L40-1091-17 L40-1091-17 L39-1309-05 L79-0125-05	SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR COMBINATION COIL LC FILTER	TE KPYMX TE	6
L301,302 L301,302 L401,402 X1 X2			L40-1091-17 L40-1091-17 L40-1091-17 L77-1122-05 L78-0295-05	SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR SMALL FIXED INDUCTOR CRYSTAL RESONATOR 7.200MHz RESONATOR 19.000kHz	KPYMXT	7 6 7
X301 X301 X401			L78-0601-05 L78-0601-05 L78-0601-05	RESONATOR 7.160MHz RESONATOR 7.160MHz RESONATOR 7.160MHz	KPYMXT	7 6 7
2 4	1B 1B		N09-0333-05 N89-3008-46	TAPPING SCREW (3X12) BINDING HEAD TAPTITE SCREW		
₹8 ₹21			RD14NB2E101J RD14NB2E470J	RD 100 J 1/4W RD 47 J 1/4W	TE	

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 $\triangle$  indicates safety critical components.

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		Description	Desti-	Re- marks
l l		部 品 名 / 規 格		備考
	RD14NB2E680J RD14NB2E101J RS14KB3D221J RD14NB2E101J RS14KB3D221J	RD 68 J 1/4W RD 100 J 1/4W FL-PROOF RS 220 J 2W RD 100 J 1/4W FL-PROOF RS 220 J 2W	KPYMX TE	
	RD14NB2E101J RS14KB3A101J RS14KB3D181J RS14KB3D181J RD14NB2E470J	RD 100 J 1/4W FL-PROOF RS 100 J 1W FL-PROOF RS 180 J 2W FL-PROOF RS 180 J 2W RD 47 J 1/4W	КРҮМХТ	7 6 7
	RD14NB2E470J RD14NB2E101J RD14NB2E101J R12-3688-05 R12-3686-05	RD 47 J 1/4W RD 100 J 1/4W RD 100 J 1/4W TRIMMING POT.(47K) FM TUNED TRIMMING POT.(22K) AM TUNED	KPYMXT KPYMXT	6 7 6
	R12-6663-05	TRIMMING POT. (330K) SEPARATION		
	S31-2132-05 S31-2132-05	SLIDE SWITCH DE ENPHASYS,CH SLIDE SWITCH IMPEDANCE SELECT	MY	7
	HZS5.1N(B2) RD5.1ES(B2) HSS104 1SS133 HSS104	ZENER DIODE ZENER DIODE DIODE DIODE DIODE	TE TE	
	1SS133 HSS104 1SS133 HZS5.1N(B2) RD5.1ES(B2)	DIODE DIODE DIODE ZENER DIODE ZENER DIODE	TE TE TE TE	
	HZS13N(B2) RD13ES(B2) HSS104 1SS133 HZS6.2N(B2)	ZENER DIODE ZENER DIODE DIODE DIODE ZENER DIODE	TE TE	
	RD6.2ES(B2) HZS8.2N(B2) RD8.2ES(B2) HZS3.9N(B2) RD3.9ES(B2)	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE		
	HZS5.6N(B2) RD5.6ES(B2) HSS104 1SS133 HZS5.6N(B2)	ZENER DIODE ZENER DIODE DIODE DIODE ZENER DIODE		7
	HZS5.6N(B2) RD5.6ES(B2) RD5.6ES(B2) HZS6.2N(B2) HZS6.2N(B2)	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE	KPYMXT KPYMXT KPYMXT	6 7 6 7 6
	RD6.2ES(B2) RD6.2ES(B2) HZS5.6N(B2) RD5.6ES(B2) HSS104	ZENER DIODE ZENER DIODE ZENER DIODE ZENER DIODE DIODE	KPYMXT	7 6 7 7
	Par	位置 新 部 品 季 号  RD14NB2E680J RD14NB2E101J RS14KB3D221J RD14NB2E101J RS14KB3D221J RD14NB2E101J RS14KB3D181J RS14KB3D181J RS14KB3D181J RD14NB2E470J RD14NB2E101J RD14NB2E101J RD14NB2E101J RD14NB2E101J RD14NB2E101J RD14NB2E101J RD14NB2E101J RD14NB2E101J RD14NB2E1001J RD14	### ### ### ### ### ### ### ### ### ##	### ### ### ### ### ### ### ### ### ##

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Ref. No.	Address 位置	New Parts	Parts No. 部品署号	Description 部 品 名 / 規 格	Desti- nation 仕 向	Re- marks 備考
D402-407 IC1 IC2 IC3 IC4		41	1SS133 LA1266 LA3401 LC7218 M5223P	DIODE IC(AM/FM IF) IC(FM MPX) IC(PLL SYNTHESIZER) IC(OP AMP X2)	TE	7
IC201 IC202 IC203 IC204 IC205			NJM4580D-D NJU7313L NJU7311L NJM4580D-D NJU7312L	IC(OP AMP X2) IC(ANALOG SWITCH) IC(ANALOG SWITCH) IC(OP AMP X2) IC(ANALOG SWITCH)		
IC301 IC301 IC302 IC302 IC303		*	SSM2126P SSM2126P NE571N NE571N NJM4565L	IC(DOLBY SURROUND DECODER) IC(DOLBY SURROUND DECODER) IC(COMPANDOR) IC(COMPANDOR) IC(OP AMP X2)	KPYMXT KPYMXT	7
IC303 IC304 IC304 IC305 IC305			NJM4565L YM7128B YM7120B M5238AL M5238AL	IC(OP AMP X2) IC(DIGITAL SURROUND) IC(DIGITAL SURROUND) IC(OPAMP X2) IC(OPAMP X2)	KPYMXT KPYMXT KPYMXT	7
IC306 IC306 IC307 IC307 IC308-310			LA2730 LA2730 TC9213P TC9213P NJM4565L	IC(DOLBY SYSTEM) IC(DOLBY SYSTEM) IC(2CH ELECTRONIC VOLUME) IC(2CH ELECTRONIC VOLUME) IC(OP AMP X2)	KPYMXT KPYMXT	7 6 7 6
IC308-310 IC401 IC402 IC403 IC404,405			NJM4565L NJM4565L YM7128B M5238AL NJM4565L	IC(OP AMP X2) IC(OP AMP X2) IC(DIGITAL SURROUND) IC(OPAMP X2) IC(OP AMP X2)	КРҮМХТ	6 7 7 7
IC406 IC407 Q1 Q2 Q3	÷		TC9215P UPC4574C 25C1923(R,0) 25C1845(F,E) 25C17405(Q,R)	IC(ANALOG SWITCH X 6) IC(OP AMP X4) TRANSISTOR TRANSISTOR TRANSISTOR	крумх	7
ସ3 Q3 ,4 Q3 ,4 Q7 Q7			2SC2785(F,E) 2SC1740S(Q,R) 2SC2785(F,E) 2SC1740S(Q,R) 2SC2785(F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMX TE TE KPYMX KPYMX	
Q7 ,8 Q7 ,8 Q9 Q9 Q10	10 10 10 10 10 10 10 10 10 10 10 10 10 1		2SC1740S(Q,R) 2SC2785(F,E) 2SA1175(F,E) 2SA933S(Q,R) 2SC1740S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	TE TE TE TE	
910 9102 9102 9104 9104			2SC2785(F,E) 2SA1175(F,E) 2SA933S(Q,R) 2SA1175(F,E) 2SA933S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	TE	
Q107,108 Q107,108 Q113 Q113 Q113			2SC1740S(Q,R) 2SC2785(F,E) 2SD2012 2SD2061 2SD2374	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	YM YM	

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K:USA

P:Canada

Y:PX(Far East, Hawaii) Y:AAFES(Europe)

T:England

E:Europe

X: Australia

6: KR-V6050 7: KR-V7050 M:Other Areas

#### \* New Parts

#### **PARTS LIST**

Parts without Parts No. are not supplied.

Les articles non mentionnes dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No.	Address	New Parts	Part	s No.	Description	Desti- nation	Re- marks
参照番号	位置	新	部品	番 号	部品名/規格		備考
9201 9201 9201 9202,203 9202,203			25D2012 2SD2061 2SD2374 2SC17405 2SC2458(		TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
9202,203 9202,203 9204 9204 9204			2SC27850 2SC33114 2SD2012 2SD2061 2SD2374		TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
Q205,206 Q205,206 Q205,206 Q205,206 Q207,208			2SA1048( 2SA1175( 2SA1309A 2SA933S( 2SC2878(	F,E) (Q,R) Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
9209,210 9209,210 9209,210 9209,210 9211			2SC1740S 2SC2458( 2SC2785( 2SC3311A 2SC2003(	Y,GR) F,E) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
9212 9212 9212 9212 9213			2SA1048( 2SA1175( 2SA1309A 2SA933S( 2SC1740S	F,E) (Q,R) Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR		
9213 9213 9213 9301 9301			2SC2458( 2SC2785( 2SC3311A 2SC2003( 2SC2003(	F,E) (Q,R) L,K)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	крумхт	7 6
Q303,304 Q303,304 Q303,304 Q303,304 Q303,304			2SC1740S 2SC1740S 2SC2458( 2SC2458( 2SC2785(	(Q,R) Y,GR) Y,GR)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT KPYMXT	7 6 7 6 7
9303,304 9303,304 9303,304 9306 9306	:		2SC2785( 2SC3311A 2SC3311A 2SC1740S 2SC1740S	(Q,R) (Q,R) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT KPYMXT KPYMXT	6 7 6 7 6
9306 9306 9306 9306 9306			2SC2458( 2SC2458( 2SC2785( 2SC2785( 2SC3311A	Y,GR) F,E) F,E)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	КРҮМХТ КРҮМХТ	7 6 7 6 7
9306 9401 9403-406			2SC3311A 2SC2003( 2SC2878(	L,K)	TRANSISTOR TRANSISTOR TRANSISTOR	KPYMXT	6 7 7
			<b>₩02-</b> 1041 <b>₩02-</b> 1042		FM FRONT-END ASSY FM FRONT-END ASSY	TE KPYMX	

L:Scandinavia

K:USA

Y:PX(Far East, Hawaii)

Y:AAFES(Europe)

T:England

P:Canada E:Europe

X:Australia

M:Other Areas

6: KR-V6050 7: KR-V7050

#### **SPECIFICATIONS**

[K, P, M, X, Y type]

(For U.S.A. and Canada)

**Audio section** 

Rated power output at the STEREO operation

100 watts per channel minimum RMS, both channels driven at 8  $\Omega$ , from 20 Hz to 20,000 Hz with no more than 0.06% total harmonic distortions. (FTC)

than 5.50 total harmonic distortions. (1 10)
Power output at the Surround operation Front (1 kHz, 0.9% T.H.D. at 8 $\Omega$ ) 65 W + 65 W Center (1 kHz, 0.9% T.H.D. at 8 $\Omega$ ) 65 W Rear (1 kHz, 0.9% T.H.D. at 8 $\Omega$ ) 20 W + 20 W
Total harmonic distortion (1 kHz, 8 $\Omega$ ) 0.03% at 50 W Signal to noise ratio (IHF A)
PHONO (MM)
Input sensitivity / impedance PHONO (MM)
Tone controls  BASS
Loudness control at – 30 dB VOLUME level 0 ~ + 8 dB (100 Hz)
Video section
VIDEO inputs / outputs(Composite) 1 Vp-p / 75 $\Omega$
FM Tuner section
Tuning frequency range
MONO
Total harmonic distortion at 1 kHz MONO
Signal to noise ratio at 65 dBf (IHF) MONO
STEREO
Stereo separation (IHF at 1 kHz)
AM Tuner section
$\begin{array}{llllllllllllllllllllllllllllllllllll$
General
Power consumption
Dimensions W:440 mm (17-5/16") H:147 mm (5-13/16")

Weight (net) ...... 11.4 kg (25.1 lb)

(For other countries)

Audio section
Rated power output at the STEREO operation (IHF '66) from 20 Hz to 20 kHz, 0.06% T.H.D., at 8 $\Omega$
Loudness control at - 30 dB VOLUME level 0 ~ + 8 dB (100 Hz)
Video section  VIDEO inputs / outputs(Composite) 1 Vp-p / 75 Ω
FM Tuner section
Tuning frequency range

running irequency range	07.3 141112~100 141112
Usable sensitivity (IHF)	10.8 dBf (0.95 $\mu$ V at 75 $\Omega$ )
50 dB quieting sensitivity	
MONO	
STEREO	41.2 dBf (32 μV at 75 Ω)
Total harmonic distortion a	t 1 kHz
MONO	
STEREO	0.5 %
Signal to noise ratio at 65 c	
MONO	78 dB
STEREO	
Selectivity (IHF ± 400 kHz) .	53 dB
Stereo separation (IHF at 1	
Frequency response . 30 Hz	

#### AM Tuner section

i uning trequency range	
9 kHz	531 kHz ~ 1,602 kHz
10 kHz	530 kHz ~ 1,610 kHz
Usable sensitivity	12 µV / (400 µV / m)
Total harmonic distortion	0.3 %
Signal to noise ratio	50 dB
Selectivity	

#### General

deneral	
Power consumption	280 W
AC outlet	
SWITCHED	2: ( total 200 W max.)
	(Except for Australia)
Dimensions	W:440 mm
	H:147 mm
	D:402 mm

Weight (net) ...... 11.4 kg

Note:

D:403 mm (15-7/8")

### **SPECIFICATIONS**

[E, T type]

FM Tuner section
Tuning frequency range
Total harmonic distortion at 1 kHz (DIN) MONO 0.15%
STEREO
STEREO 61 dB (65.2 dBf input) Selectivity (DIN ± 300 kHz) 53 dB Stereo separation (DIN)
1 kHz
AM Tuner section
Tuning frequency range 531 kHz $\sim$ 1,602 kHz Usable sensitivity 12 $\mu$ V / (400 $\mu$ V / m) Total harmonic distortion 0.3 % Signal to noise ratio
(at 30% mod. 1mV input) 50 dB Selectivity 30 dB
General
Power consumption 280 W AC outlet
SWITCHED 2: (total 200 W max) Dimensions W:440 mm H:147 mm
D:403 mm Weight (net) 11.4 kg